

Before The
POSTAL RATE COMMISSION
WASHINGTON, D.C. 20268-0001

RECEIVED
APR 13 4 50 PM '00
POSTAL RATE COMMISSION
OFFICE OF THE SECRETARY

Postal Rate and Fee Changes, 2000

Docket No. R2000-1

RESPONSE OF THE UNITED STATES POSTAL SERVICE
WITNESS RAYMOND TO ADVO INTERROGATORIES
(ADVO/USPS-T13-74-100)

The United States Postal Service hereby provides the response of witness Raymond to the following interrogatories of Advo, Inc.: ADVO/USPS-T13-74-100, filed on March 20, 2000. Mr. Raymond is still in the process of preparing answers to prior sets of interrogatories encompassing ADVO/USPS-T13-24-73.

Each interrogatory is stated verbatim and is followed by the response.

Respectfully submitted,

UNITED STATES POSTAL SERVICE

By its attorneys:

Daniel J. Foucheaux, Jr.
Chief Counsel, Ratemaking


Richard T. Cooper

475 L'Enfant Plaza West, S.W.
(202) 268-2993; Fax: -5402
Washington, D.C. 20260-1137
April 13, 2000

RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS RAYMOND TO
INTERROGATORIES OF ADVO, INC.

ADVO/USPS-T13-74. As part of either the Delivery Redesign project, the Engineered Standards project, or the specific data collection project that is the Subject of your testimony, were any data collected or analyses undertaken to study or identify the relative characteristics (such as but not limited to average mail volume per route, per stop, or per delivery) of delivery units or routes with high DPS volumes, compared to those with average or low DPS volumes? If so, please provide all such data, analyses, documents and information.

RESPONSE:

Yes, there were many analyses performed on volume. Reports on these analyses are contained in 13 binders of reports that are the subject of Presiding Officer's Ruling No. R2000-1/27. These books were made available for inspection by representatives of Advo, Inc., among others, at the technical conference held on April 6, 2000, pursuant to Ruling No. R2000-1/27. I am informed that any requests for additional inspection of these documents under the protective conditions mandated by Ruling No. R2000-1/27 should be directed to Postal Service counsel.

RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS RAYMOND TO
INTERROGATORIES OF ADVO, INC.

ADVO/USPS-T13-75. The LR-163 database contains numerous central inside/central outside activity detail tallies for park & loop, foot, and dismount delivery types. How and why are these tallies different from central delivery type tallies?

RESPONSE:

Smaller central delivery types can be serviced as part of a park and loop, as a dismount or on a foot/walk out route. An example of this would be the 8-unit NDCBU's that are common in newer condominium complexes. Some central deliveries are handled as a dismount; a low-mail-volume, 4-unit apartment building would be an example. There is no difference between these tallies and the central delivery type tallies except for the how the route is defined by the USPS as a "walk out route". The carrier would have used an "Arrow" key to open the group of central boxes.

1

RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS RAYMOND TO
INTERROGATORIES OF ADVO, INC.

ADVO/USPS-T13-76. Please refer to your response to UPS/USPS-T13-7. For the tally in Row 9 of your response,

(a) Please elaborate every reason you have for including it in Load time rather than some other time.

(b) Please provide all documentation you have available that shows that the Location should be Point of Delivery rather than Vehicle.

RESPONSE:

(a) Load time as defined in the STS categories is " Delivering and collecting mail pieces at residential and business delivery points. Also included is incidental time for customer contacts and the providing of special services". After reviewing the observers' field edits, the location should have been changed to "Point of Delivery". Based on the carrier being at the point of delivery, and this matching the definition for Load Time, I find that the record should have been changed, but was not.

(b) The observer had edited the daily print out of observations (see 1st of two attached pages). The USPS form 3999X (the 2nd attached page) shows the carrier dismounting to service 11 delivery points starting at 12:23 p.m. and ending at 12:30 p.m. These two documents show that the carrier was not in the vehicle at 12:26 as the tally shows.

RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS RAYMOND TO
INTERROGATORIES OF ADVO, INC.

DATE 7/5/97

CLASS: 3.35
DATE: 06/19/97

3999X

PAGE: 3
TIME: 12:56

ZIP Code: 30087 Route: 8735

Allied Function	Time	Delivery	Secondary	Res	Bus	SIP-4					Seq
Delivery Method	Start	End	Used	Number	Desc-Unit	1621	1622	High	Firm	Add Info	No
				HERITAGE LN				Time Enter:	12:17	Time Used:	1858
				5966 ✓	2	1.5					59
				5936 ✓	2	1.5					60
				HERITAGE LN				Time Enter:		Time Used:	1847
				5898 ✓	2						61
				5874 ✓	2						62
				5898 ✓	2						63
				5836 ✓	2	1.5					64
				5826 ✓	2	1.5					65
				HERITAGE LN				Time Enter:	12:23	Time Used:	1848
				5825 ✓	2						66
				5839 ✓	2	1.5					67
				5855 ✓	2	1.5					68
				5867 ✓	2						69
				5875 ✓	2	2					70
				5883 ✓	2	1.5					71
				5895 ✓	2						72
				5907 ✓	2	1.5					73
				5919 ✓	2						74
				5931 ✓	2						75
				5933 ✓	2	1.5					76
				5938 ✓	2	2					77
				5949 ✓	2	1.5					78
				5965 ✓	2	1.5					79
				HERITAGE WAY				Time Enter:	12:30	Time Used:	1849
				1668 ✓	2						80
				OLD STONE MOUNTAIN RD				Time Enter:		Time Used:	1833
				5888 ✓	2						81
				5834 ✓	2	2					82
				5848 ✓	2						83
				5850 ✓	2						84
				5846 ✓	2	1.5					85
				5838 ✓	2						86
				5828 ✓	2						87
				5812 ✓	2	2					88
				OLD STONE MOUNTAIN RD				Time Enter:	12:35	Time Used:	1821
				5794 ✓	2	2					89
				LILBURN STONE MOUNTAIN RD				Time Enter:		Time Used:	1823
				1657 ✓	2						90
				LILBURN STONE MOUNTAIN RD				Time Enter:		Time Used:	1825
				1705 ✓	2						91
				LILBURN STONE MOUNTAIN RD				Time Enter:		Time Used:	1720
				1800 ✓	2						92
				1803 ✓	2						92

Residential	1:	0	2:	2	3:	0	4:	0	Det Box:	0	Possible Deliveries:	34
Business	5:	0	6:	0	7:	0	8:	0	MFU	0	Deliveries Made:	

DATE 7/5/97 Route 8735

		Observer: OBS49					
Subject Present SP01	Subject Present	L08	A00	WT02	S04	T02	K01
Job Classification JC03	PTF Part Time	Vehicle	N/A	Curb	Resident Outside	Travel B/t Dlvr.	LLV
		12:08 PM	12:08 PM	12:08 PM	12:08 PM	12:08 PM	12:08 PM
Subject Present SP01	Subject Present	L12	A00	WT02	S04	J08	H08
Job Classification JC03	PTF Part Time	Point of Deliver	N/A	Curb	Resident Outside	Del/Coll.	# 2 Box
		12:14 PM	12:14 PM	12:14 PM	12:14 PM	12:14 PM	12:14 PM
Subject Present SP01	Subject Present	L08	A00	WT02	S04	J08	H06
Job Classification JC03	PTF Part Time	Vehicle	N/A	Curb	Resident Outside	Del/Coll.	# 1 Box
		12:20 PM	12:20 PM	12:20 PM	12:21 PM	12:21 PM	12:21 PM
Subject Present SP01	Subject Present	L08	A00	WT04	S04	J08	H10
Job Classification JC03	PTF Part Time	Vehicle	N/A	Dismount	Resident Outside	Del/Coll.	Drop to Cust
		12:20 PM	12:26 PM	12:27 PM	12:27 PM	12:27 PM	12:28 PM
Subject Present SP01	Subject Present	L08	A00	WT02	S04	T02	K01
Job Classification JC03	PTF Part Time	Vehicle	N/A	Curb	Resident Outside	Travel B/t Dlvr.	LLV
		12:34 PM	12:34 PM	12:34 PM	12:34 PM	12:34 PM	12:34 PM
Subject Present SP01	Subject Present	L12	A00	WT02	S04	J08	H06
Job Classification JC03	PTF Part Time	Point of Deliver	N/A	Curb	Resident Outside	Del/Coll.	# 1 Box
		12:38 PM	12:39 PM	12:39 PM	12:39 PM	12:39 PM	12:39 PM
Subject Present SP01	Subject Present	L12	A00	WT02	S04	J08	H07
Job Classification JC03	PTF Part Time	Point of Deliver	N/A	Curb	Resident Outside	Del/Coll.	# 1-1/2 Box
		12:45 PM	12:45 PM	12:45 PM	12:45 PM	12:45 PM	12:45 PM
Subject Present SP01	Subject Present	L12	A00	WT02	S04	J08	H06
Job Classification JC03	PTF Part Time	Point of Deliver	N/A	Curb	Resident Outside	Del/Coll.	# 1 Box
		12:51 PM	12:51 PM	12:51 PM	12:51 PM	12:51 PM	12:51 PM
Subject Present SP01	Subject Present	L08	A00	WT02	S04	T02	K01
Job Classification JC03	PTF Part Time	Vehicle	N/A	Curb	Resident Outside	Travel B/t Dlvr.	LLV
		12:57 PM	12:57 PM	12:57 PM	12:57 PM	12:57 PM	12:57 PM
Subject Present SP01	Subject Present	L08	A00	WT02	S04	J11	K01
Job Classification JC03	PTF Part Time	Vehicle	N/A	Curb	Resident Outside	Setup	LLV
		1:03 PM	1:03 PM	1:03 PM	1:03 PM	1:03 PM	1:03 PM

RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS RAYMOND TO INTERROGATORIES OF ADVO, INC.

RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS RAYMOND TO
INTERROGATORIES OF ADVO, INC.

ADVO/USPS-T13-77. Please refer to your response to UPS/USPS-T13-7. If the carrier was on his route and deviated to deliver a parcel, please explain fully why the Location would then be recorded as "Other Route."

RESPONSE:

The observers had the USPS form 3999X with them at all times. The observers knew from the USPS form 3999X the intended route of the carrier. If the carrier had deviated from the expected route, the observer would have recorded "other route" due to the deviation. Typically, parcels that are delivered on a route are delivered in the sequence of the route.

RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS RAYMOND TO
INTERROGATORIES OF ADVO, INC.

ADVO/USPS-T13-78. For the "Central Inside" receptacle detail (Code H12), please identify the types of receptacles and/or drops that could be encompassed within that code (e.g., drop to a central mailroom, one or more banks of central receptacles, groupings of individual receptacles that could also be used as single delivery receptacles).

RESPONSE:

The "Central Inside" activities detail code H12 would refer to a group of delivery points that required an "arrow" key to open the set of boxes in most cases. The carrier would have been inside a building, typically an apartment complex, thus not having to deal with the weather. The bank of boxes could range from 4 central boxes up to 64 central boxes. There could also be several banks of boxes that require several uses of the "arrow" key. These receptacles could be top loaded, front loaded, or back loaded.

H12 should not have been used for a "drop to a central mailroom". If the carrier did drop mail at a central mailroom where the customer would then perform the distribution to his customers (which is called a "hotel – motel agreement"), or at a "Mail Boxes Etc., or retirement home, code H10, "Drop to Customer," would have been used.

RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS RAYMOND TO
INTERROGATORIES OF ADVO, INC.

ADVO/USPS-T13-79. Is a "flat receptacle" always associated with some other type of receptacle? Please explain.

RESPONSE:

In most cases the "flat receptacles" are the "J" shaped hooks under a flip-top type of mailbox. The carrier rolls the newspaper or magazine being delivered and places the roll in the hooks.

RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS RAYMOND TO
INTERROGATORIES OF ADVO, INC.

ADVO/USPS-T13-80. In your response to MPA/USPS-T13-15, which asked you to describe how data collectors were selected and trained, you provided the following information with respect to Phase 2 data collectors:

- Three of the Phase 2 data collectors participated in Phase 1 data collections.
- Six new data collectors received on-the-job training for three weeks during the Phase 2 data collections.
- Eighteen new data collectors received on-the-job training for two weeks during the Phase 2 data collections.

With respect to this response, please answer the following:

- (a) The above three categories total up to 27 data collectors. However, your response to MPA/USPS-T13-16 lists 47 data collectors (by observer code number) in Phase 2. Please state the correct total number of data collectors that participated in any part of the Phase 2 data collections.
- (b) Does this mean that an additional 20 data collectors were hired sometime after the 27 identified above? If not, please indicate the correct number of additional data collectors hired.
- (c) Please explain how much on-the-job training (in days or weeks) these last 20 data collectors received. If the amount varied by individual, please indicated the range of training.
- (d) Are the "observer code numbers" arranged in the order of hire; e.g., do the last 20 observer code numbers correspond to the 20 last-hired data collectors in (b) above? If not, provide a list that groups observer code numbers by training category.

RESPONSE:

- (a) Yes, a total of 47 data collectors participated in Phase 2.
- (b) Yes, 20 data collectors were added during the Phase 2 data collection.
- (c) The observers used after the initial group received 2 to 3 weeks training with two of the original 27 observers. Based on the observed ability of each individual to learn the objects to be recognized, the associated barcodes, and the techniques for operation of the equipment, the length of training needed for that individual would be determined by the OJT team. The Post Office Subject matter

RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS RAYMOND TO
INTERROGATORIES OF ADVO, INC.

expert and the quality control personnel would also monitor the ability of the observer(s).

(d) No. The following listing shows the date that each Phase 2 observer started:

Code	Phase 1	Phase2	First 6	Second 18	Last 20	Date Started
OBS02	X					
OBS04	X					
OBS05	X					
OBS06	X					
OBS07	X					
OBS08	X	X				
OBS09		X	1			3/24/97
OBS10		X			14	6/30/97
OBS12	X	X				
OBS13	X	X				
OBS14		X	2			3/24/97
OBS15		X	3			3/24/97
OBS16		X	4			3/24/97
OBS17		X	5			3/24/97
OBS18		X	6			3/24/97
OBS19		X		1		4/14/97
OBS20		X		2		4/14/97
OBS21		X		3		4/14/97
OBS22		X		4		4/14/97
OBS23		X		5		4/14/97
OBS24		X		6		4/14/97
OBS25		X		7		4/14/97
OBS26		X		8		4/14/97
OBS27		X		9		4/14/97
OBS31		X		10		4/14/97
OBS32		X		11		4/14/97
OBS33		X		12		4/14/97
OBS35		X		13		4/14/97
OBS36		X		14		4/14/97
OBS37		X		15		4/14/97
OBS38		X		16		4/14/97
OBS39		X		17		4/14/97
OBS40		X		18		4/14/97
OBS42		X			1	4/28/97
OBS43		X			2	5/5/97
OBS46		X			3	5/13/97
OBS47		X			4	5/13/97

RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS RAYMOND TO
INTERROGATORIES OF ADVO, INC.

OBS45	X	5	5/19/97
OBS48	X	6	5/19/97
OBS49	X	7	5/26/97
OBS50	X	8	6/2/97
OBS29	X	9	6/16/97
OBS30	X	10	6/16/97
OBS28	X	11	6/30/97
OBS51	X	12	6/30/97
OBS52	X	13	6/30/97
OBS53	X	15	7/21/97
OBS54	X	16	7/28/97
OBS55	X	17	8/19/97
OBS57	X	18	12/15/97
OBS56	X	19	12/22/97
OBS58	X	20	1/12/98

RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS RAYMOND TO
INTERROGATORIES OF ADVO, INC.

ADVO/USPS-T13-81. With respect to the Level 11.2 Delivery Type and Level 11.3 Delivery Type Status codes, please

(a) Confirm that, although the barcode descriptions in Appendix C (page 22) call them "route" codes, these codes relate to a delivery or set of deliveries rather than the entire route. If this is incorrect, please explain fully.

(b) Explain how these two types of codes were identified for a "Point of Delivery" location.

(c) For "Point of Delivery" location, explain where and when the information was gathered on the delivery types/delivery status for a route (i.e., was it decided as each observation was made or taken from an already filled-out form? Would it depend upon whether the carrier had an a typical delivery to make to a certain address?).

(d) For all other (Level 10) location codes, provide the information requested in (b) and (c) above.

RESPONSE:

(a) With respect to the Level 11.2 Delivery Type and Level 11.3 Delivery Type

Status codes, confirmed that these "route codes" only related to the specific delivery point being sampled, rather than the entire route.

(b) The level 11.2 outside delivery type is defined by the circumstances at the delivery point. In general, if the carrier was walking and delivering to delivery points after a park point, the delivery type is classified as park and loop. Generally, if the carrier dismounted the vehicle to deliver one or several delivery points without the satchel, the delivery point is classified as a dismount. If the carrier remained in the vehicle and serviced a mailbox from the vehicle, the delivery type generally is classified as curb. If the carrier parked the vehicle at a delivery point, obtained a satchel, and/or took trays or tubs of mail with him, and the delivery points being serviced required an "arrow" key to open the group of delivery points, the delivery type generally is

11

RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS RAYMOND TO
INTERROGATORIES OF ADVO, INC.

classified as central. If the carrier had a "walk out route," most of the delivery points serviced on the route would have been classified as a foot delivery type. The only exception I can recall to this rule would have been if the carrier on a foot route used the "arrow" key to open the central box. In this case, the delivery type would have been classified as central.

The level 11.3 codes for delivery type status were generally determined by using the USPS form 3999X. The delivery types on the form list types 1 through 4 as residential deliveries and types 5 through 8 as business deliveries. The observer would determine if the mailbox was inside (i.e., carrier is out of the weather) or outside to distinguish between inside and outside delivery type status.

(c) The USPS form 3999X was used as a guide to establish expectations regarding delivery type and delivery type status. Once at the actual delivery point, the observer, based on his observations, would select the specific delivery type and delivery type status.

(d) For the locations PBL, Dock and Gas Station the 11.2 level outside delivery type could be N/A or the next delivery type the carrier was to encounter on the route. The 11.3 level delivery type status could be N/A or the next delivery type status the carrier was to encounter next on his route. The 11.3

RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS RAYMOND TO
INTERROGATORIES OF ADVO, INC.

level delivery type status recorded whether the carrier was inside or outside at business or residential deliveries.

For the locations On Route, Vehicle, In Vehicle Stopped, In Vehicle Traffic, and Wait While Walking, the 11.2 and 11.3 levels could be N/A if the carrier's travel path was returning to unit, moving the vehicle to load, loading at the unit, traveling to lunch, or to other places where the carrier is not associated with a delivery type. The 11.2 level for the above locations could also be associated with any of the five outside delivery types the carrier was about to encounter next on the route. Please note that on some foot routes the carrier rides in another carrier's vehicle to get to the route's first delivery. In this case the location would be vehicle, the delivery type foot, and the delivery type status N/A.

For the Park Point location, most 11.2 delivery types will be Park and Loop. For the Park Point location, any of the five delivery type status codes (11.3) might apply. Most of the activities that are occurring at the Park Point are setup, loading or unloading the vehicle. A Park Point also occurs at central deliveries. A Park Point is also associated with some of the 11.3 delivery type status codes recorded as dismount in 11.2. If the USPS form 3999X lists the park point, but the carrier delivered the mail as a dismount, the observers would have recorded this as a Park Point with a dismount delivery.

RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS RAYMOND TO
INTERROGATORIES OF ADVO, INC.

For the location shown as collection box, all 11.2 level codes could apply.

The most common is dismount. Several routes were studied that ended in an hour or two of collections. The carrier would pull up to the collection box and dismount to service the box. All five of the level 11.3 delivery type status codes could apply depending on the location of the collection box (inside, outside, residential or business).

The relay box location was primarily used with the 11.2 delivery type of foot route, with 11.3 delivery type status based on the location of the box (inside, outside, residential or business). There were several occasions where a carrier on another route was assigned to drop a relay bag for another carrier before delivering the park and loop portion of his own route. When this occurred, the observers would have known this was a stop on the loop, and recorded the 11.2 level as park and loop. A similar situation could occur if the carrier, while making curb deliveries along his route, dismounted to drop a relay bag for another carrier. This would generally be recorded as a dismount.

RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS RAYMOND TO
INTERROGATORIES OF ADVO, INC.

ADVO/USPS-T13-82. Please refer to the PS Form 3999X "Examination of Letter Carrier Worksheet" presented in Appendix E to your testimony.

(a) Please provide the route observers' definitions of the following delivery types from Form 3999:

Type 1 residential deliveries
Type 2 residential deliveries
Type 3 residential deliveries
Type 4 residential deliveries
Type 5 business deliveries
Type 6 business deliveries
Type 7 business deliveries
Type 8 business deliveries

(b) For each of the delivery types in (a), please provide any systematic instructions provided to the observers with respect to the type of receptacles or other delivery conditions that might be expected.

RESPONSE:

(a) Type 1 residential deliveries are residential deliveries that fall into a category the USPS refers to as "other", that is the deliveries are not curb, central or NDCBU (Neighborhood Delivery Collection Box Unit). Typically, single delivery points served by walking and delivered from a satchel or as a dismount.

Type 2 residential deliveries are the residential curb type deliveries. Typically, one or more rural boxes that are served while remaining in the vehicle.

Type 3 residential deliveries are the neighborhood delivery collection box unit (NDCBU) type deliveries. These boxes are typically located outside, are owned by USPS, have larger openings than the older central boxes, can be accessed from the back or may swing to open.

RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS RAYMOND TO
INTERROGATORIES OF ADVO, INC.

Type 4 residential deliveries are the residential central type deliveries. The customer owns the boxes, typically inside serving multiple apartments, usually accessed from the front after opening with an arrow key.

Type 5 business deliveries are business deliveries that fall into a category the USPS refers to as "other", that is the deliveries are not curb, central or NDCBU (Neighborhood Delivery Collection Box Unit). Typically single delivery points served by walking and delivered from a satchel or as a dismount.

Type 6 business deliveries are the business curb type deliveries. Typically, one or more rural boxes that are served while remaining in the vehicle.

Type 7 business deliveries are the business neighborhood delivery collection box unit (NDCBU) type deliveries. These boxes are typically located outside, are owned by USPS, have larger openings than the older central boxes, can be accessed from the back or may swing to open. Some malls may have a group of NDCBU's located inside.

Type 8 business deliveries are the business central type deliveries. The customer owns the boxes, typically inside serving multiple businesses, usually accessed from the front after opening with an arrow key.

RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS RAYMOND TO
INTERROGATORIES OF ADVO, INC.

(b) It is important to note, at the outset, that the study was designed so that there would be no need for complicated instructions for observers. Once the observers were made familiar with the materials they would use, the observers were simply instructed to record what they saw. These observations were recorded by selecting from among a pre-defined hierarchy of alternatives relating to carrier activities that might take place at the particular points at which the observations were made. The data collection phase allowed for complete coverage of the carrier's workday. If any unusual situation occurred, the observer made a comment on the comments log, and/or video-taped the situation for review with the Subject Matter Expert, Quality Assurance personnel or the Data Coordinators. During on-the-job training, the observers viewed a number of videotapes that showed various types of receptacles. They were also provided with the materials in Library Reference LR-I-220, which contains pictures of receptacles.

RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS RAYMOND TO
INTERROGATORIES OF ADVO, INC.

ADVO/USPS-T13-83. Provide a cross-tabulation of the delivery type/delivery type status codes with the Form 3999 data you collected in the format shown below:

Delivery Status	Delivery type	Res Type 1	Res Type 2	Res Type 3	Res Type 4	Bus Type 5	Bus Type 6	Bus Type 7	Bus Type 8
Residential Outside	Central								
	Curb								
	Dismount								
	Foot								
	Park&Loop								
Residential Inside	Central								
	Curb								
	Dismount								
	Foot								
	Park&Loop								
Business Outside	Central								
	Curb								
	Dismount								
	Foot								
	Park&Loop								
Business Outside	Central								
	Curb								
	Dismount								
	Foot								
	Park&Loop								

RESPONSE:

I will attempt to respond as fully as possible to this question. First, however, it must be noted that the data were not collected in a fashion that would permit the requested cross-tabulation. The work sampling tallies that contain the Delivery Status and Delivery type were not designed to allow for entry of the USPS form 3999X delivery types one through eight. This data is available separately and is provided below.

RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS RAYMOND TO
INTERROGATORIES OF ADVO, INC.

It should also be noted that not all tallies contain the Delivery Status.

Approximately 4000 tallies are in the database as "N/A". The reasons for the "N/A" entries vary, depending on whether the carrier was on a break, taking personal time, loading or unloading the vehicle, traveling to the first delivery or returning to the unit and many many more activities that the carrier performs that are not associated with the Delivery Status.

Third, it must be noted that the delivery status was a minor piece of the total data collection. The delivery status was not used in any portion of the Engineered Standards or data analysis performed on the data collected.

With that said, I can provide the following information.

Delivery Status	Delivery Type	Tallies
Residential Outside	Central	4243
	Curb	12699
	Dismount	3997
	Foot	765
	Park & Loop	7226
Residential Inside	Central	1197
	Curb	3
	Dismount	38
	Foot	54
	Park & Loop	125
	N/A	1
Business Outside	Central	400
	Curb	21
	Dismount	1068
	Foot	53
	Park & Loop	269
Business Inside	Central	291

RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS RAYMOND TO
INTERROGATORIES OF ADVO, INC.

	Curb	8
	Dismount	1628
	Foot	169
	Park & Loop	525
N/A	Central	614
	Curb	1803
	Dismount	781
	Foot	130
	Park & Loop	727
	N/A	21

The data used by witness Baron contained:

Residential Type 1	88862
Residential Type 2	144876
Residential Type 3	59898
Residential Type 4	59101
Business Type 5	18369
Business Type 6	4126
Business Type 7	4088
Business Type 8	5509

RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS RAYMOND TO
INTERROGATORIES OF ADVO, INC.

ADVO/USPS-T13-84. With respect to LR I-220 (Engineered Standards Book of Forms/Pictures) and LR I-221 (Engineered Standards Book of Barcodes), please confirm:

(a) There are a number of photographs of mail equipment and mail receptacles in LR I-220, but, with the possible exception of "gang box," there are no photographs or other graphics that specifically identify a receptacle type as it relates to a receptacle type description or (Level 11.4.1, Delivery Details H) code, as described in the barcode book.

(b) There are no photographs in LR I-220 that explicitly identify with or relate to any Level 10 Location or Level 11.4 Outside Activity codes, as described in the barcode book.

RESPONSE:

(a) Confirmed. The observers were instructed on the job by the USPS Subject Matter Expert, participants that were performing data collection, and the Quality Control (QC) staff. During on-the-job training (OJT), observers would have viewed USPS training videos and or other videos with the USPS Subject Matter Expert, who would identify the various types of delivery receptacles, along all other pertinent work sampling selections. The NDCBU deliveries and central deliveries are clearly defined in the Library Reference LR I-220. The other receptacle types were defined in the OJT instruction.

(b) Confirmed. The observers were instructed on the job by the USPS Subject Matter Expert, participants that were performing data collection, and the QC staff. During the OJT observers would have viewed USPS training videos and/or other videos with the USPS Subject Matter Expert, who would identify the various Level 10 Locations or Level 11.4 Outside Activity codes, along all other pertinent work sampling selections. It should be noted that certain locations, such as the

RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS RAYMOND TO
INTERROGATORIES OF ADVO, INC.

loading dock, are so easy to identify that it was not necessary to include photos specifically of them. In such cases, these readily-identified locations were included in photos of other items. Even where obvious, and when no specific picture was included, observers still received instruction regarding these locations in conjunction with instruction regarding use of the bar code sheets and scanners.

RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS RAYMOND TO
INTERROGATORIES OF ADVO, INC.

ADVO/USPS-T13-85. Please refer to your Appendix A, "Delivery - Basic," which provides a flowchart of carrier activities and route characteristics that were used to develop the barcode method.

(a) By barcode method, do you mean the work/activities sampling process or did the barcode method extend to other projects your organization was also performing (i.e., the time studies, methods analyses)? Please explain.

(b) Were flowcharts such as these given to the data collectors/observers as part of their training process (e.g., something like this was included in LR I-220, the Engineering Standards Book of Forms/Pictures)? Please explain.

(c) Please confirm that the code numbers on the flowchart in Appendix A were not included in the barcode information in your Appendix C or anywhere else in your testimony, but were only provided later when you filed LR I-221. If this is incorrect, please explain,

RESPONSE:

(a) The barcode method referred to is used in a broad sense, that is, it applied to uses beyond just the work sampling. Levels 1 through 13 covered more than just the work sampling. Please refer to Library Reference LR-I-221 for all barcodes used in the study. The barcode method was also used in inputting other data items for analysis. An example would be time study data extracted from videotapes used for method analysis and validation of the MOST® predetermined time system.

(b) Yes, the observers were provided with a complete set of flow charts. The Library Reference LR I-221 material, as well as verbal instruction from the USPS Subject Matter Expert and participants in the data collection design phase also formed part of the instruction. USPS work methods videos were also used in

RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS RAYMOND TO
INTERROGATORIES OF ADVO, INC.

training observers to recognize various USPS methods to be captured by the bar code scanning method.

(c) Confirmed, the code numbers that are included in Appendix A are the codes used for time studying the activities listed in the flowchart. These were not included in Appendix C because they were not relevant to the work sampling which is the subject of my testimony.

RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS RAYMOND TO
INTERROGATORIES OF ADVO, INC.

ADVO/USPS-T13-86. Please refer to your Appendix A, "Delivery - Basic," which provides a flowchart of carrier activities and route characteristics that were used to develop the barcode method.

(a) Please confirm that for Central Inside, Central Outside, and Dismount deliveries there are no words or codes describing the carrier activities of walking to and from vehicle (at a park point) or between delivery points. If this is incorrect, please explain fully.

(b) Please confirm that for Park & Loop deliveries there are no words or codes describing the carrier activities of walking to and from vehicle (at a park point), along route, or between delivery points. If this is incorrect, please explain fully.

(c) Please confirm that for Foot deliveries there are no words or codes describing the carrier activity of walking to or from relay point, along route, or between delivery points. If this is incorrect, please explain fully.

(d) Please confirm that for any delivery type, there are no words or codes describing the carrier activity of walking from a routine delivery point to make a special delivery of an accountable or parcel. If this is incorrect, please explain fully.

If you cannot confirm any of the above, please explain why not.

RESPONSE:

(a-b) Confirmed, that on the Appendix A Delivery Basic that for Central Inside, Central Outside, Dismount deliveries, and Park and Loop there are no words or codes describing the carrier activities of walking to and from vehicle (at a park point) or between delivery points, the words or codes do not appear on the flowchart. It was not the intent of this flow process chart to identify the work sampling codes, but to define the boundaries of the time study groupings. The work sampling data collection method used the T05 code for walking when the carrier was traveling to or from the vehicle with no mail, satchel or parcel.

RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS RAYMOND TO
INTERROGATORIES OF ADVO, INC.

(c) The words "Foot deliveries" as stated in your question do not appear on the flow chart. Walking DT13 does appear on the sheet, and the first box in the flow process contains the words "Walk to Del point". There are no additional words or codes describing the carrier activity of walking to or from relay point, along route. It was not the intent of this flow process chart to identify the work sampling codes, but to define the boundaries of the time study groupings.

(d) Confirmed, that for any delivery type, there are no words or codes describing the carrier activity of walking from a routine delivery point to make a special delivery of an accountable or parcel.

RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS RAYMOND TO
INTERROGATORIES OF ADVO, INC.

ADVO/USPS-T13-87. With respect to the Videx TimeWand II scanner, please provide the following:

- (a) The program listing and all programming documentation for the scanner.
- (b) Identification of whether the individual who programmed the scanner was you, a regular employee of your firm, or some other individual.
- (c) Full information on whether the scanner was programmed so that certain codes could not be used with certain other (incompatible) codes.
- (d) Confirmation that once the Videx II scanner's data file was opened (for an observation), the scanner would permit codes only in hierarchical order (i.e., a higher level code could not precede a lower level code). If this is incorrect, please explain.
- (e) Confirmation that the Videx II scanner would not permit a level from being omitted during an observation. If this is incorrect, please explain.
- (f) Confirmation that the Videx II scanner would prompt the data collector (on the LCD) for each Level's scan, If this is incorrect, please explain. Information on precisely when the scanner's data file was opened and the clock reading was made (was it right after it beeped or when the data collector scanned the first barcode?).
- (g) The estimated time required by the data collector to scan one full observation.

RESPONSE:

(a) The programming of scanner is an interactive process that does not yield a listing such as with a Fortran program or the like. No programming documentation exists other than a TimeWand II Application Builder manual, that was used to build an Access module that was used to program the wands. This manual will be filed shortly as a library reference. This Access module was among the items made available for inspection at the technical conference held on April 6, 2000, pursuant to Presiding Officer's Ruling No. R2000-1/27.

RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS RAYMOND TO
INTERROGATORIES OF ADVO, INC.

(b) The original software/data collection hierarchy was programmed by a regular employee of my firm. The scanners were programmed automatically in the field when the observers did their "upload/download" of data. The software used for the study provided the communication to "upload" the program to the wands and "download" or retrieve the data collected from the wands.

(c) The scanner programming requires that the barcode hierarchy be followed. The scanner will not accept bar codes that are not listed in the level being scanned.

(d) Confirmed, the scanner requires the observer to use the data collection hierarchy.

(e) Confirmed, the scanner programming requires the observer to proceed from level 10 through level 11.4.1.

(f) Confirmed, the scanner LCD screen prompted the observer. The time recorded in the data record is the time the barcode is physically scanned.

(g) The observer could complete the level 10 through 11.4.1 scan sequence in approximately 5 to 20 seconds.

RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS RAYMOND TO
INTERROGATORIES OF ADVO, INC.

ADVO/USPS-T13-88. With respect to the Videx TimeWand II, please provide:

- (a) The name and address of its manufacturer or supplier.
- (b) Any additional model or identifier numbers or names.
- (c) If available, an operational scanner (to be filed at the Commission for viewing and handling).

RESPONSE:

- (a) Videx, Inc., 1105 NE Circle Blvd., Corvallis, Oregon 97330
- (b) TimeWand II, with 320 k of memory
- (c) A scanner has already been made available for inspection to Advo, Inc., and other parties at the technical conference on April 6, 2000, held pursuant to Presiding Officer's Ruling NO. R2000-1/27.

RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS RAYMOND TO
INTERROGATORIES OF ADVO, INC.

ADVO/USPS-T13-89. For the team of two individuals that collected data for a route-day, please explain:

- (a) Were all "Study" and "Work Sample" data (indicated as requiring collection in LR I-221) input into the same Videx TimeWand II scanner or were both individuals on the team scanning different kinds of data on two separate scanners during the day?
- (b) Were the Level 9 (Inside and Outside) event quantities (indicated as requiring collection in LR I-221) physically counted by the individual with the Videx TimeWand II scanner or by the other individual?
- (c) Were any other data (not included as barcodes in LR I-221) also being scanned into the same Videx TimeWand II scanner that was being used to scan the work/activity sampling data? If so, please identify and explain.
- (d) Did the individuals on the team sometimes switch assignments over the course of a day? If so, and there was some routine involved, please explain fully.
- (e) Were the data collectors involved in timing any activities during the data collection? If so, please explain what activities were timed, how those activities were timed, and how the information was recorded.

RESPONSE:

(a) The intent was for only one observer to be responsible for all scanning with all of the data being entered into one wand. The other observer was obtaining quantity information, driving the car used in following the carrier, videotaping or performing other observations required. On rare occasions more than one wand was used in a day, when it became necessary to replace the initial wand, due to battery failure, for example. The observations scanned did not overlap.

(b) The level 9 event quantities were associated with the time study that was taking place. Some of the time studies required very little quantity data. In these

RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS RAYMOND TO
INTERROGATORIES OF ADVO, INC.

cases the quantity data was collected and entered by the observer scanning.

Other time studies required a greater amount of quantity data. In these cases, the other observer helped collect this information.

(c) Library Reference LR-I-221 contains all the barcodes used in this portion of the study.

(d) Observers did infrequently switch places. I do not believe this took place with any regular routine. Typically an observer did the scanning for the whole day.

The observers that did switch assignments should have gone back to level 1 and changed the observer code to their own code.

(e) The scanner, by putting a time and date stamp on every barcode scanned, allows for the study software to calculate the event being time studied. The level 8 in Library Reference LR-I-221 shows the events that were time studied. Please refer to ADVO/USPS-T13-98 (b) for a complete list of events time studied.

RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS RAYMOND TO
INTERROGATORIES OF ADVO, INC.

ADVO/USPS-T13-90. With respect to LR USPS I-221 (Engineered Standards Book of Barcodes), please provide the following:

- (a) A confirmation that these are all the barcodes used in the activity sampling project. If they are not, please provide all the barcodes.
- (b) A confirmation that the barcodes on the second page of codes are the Level 7 codes. If this is not correct, please explain and provide the Level 7 codes.
- (c) A full explanation of and definitions for the barcodes on the second page of the barcode book.
- (d) For each barcode, identify and explain:
 - (i) whether it was used to develop work/activity-sampling data (regardless of whether the data are included in LR I-163) data for some other purpose, or data for multiple purposes.
 - (ii) whether it would be scanned by the individual with the Videx II scanner and collecting the work/activity sampling data, or by another individual handling another scanner (collecting something other than activity sampling data).

RESPONSE:

(a) Confirmed, the barcodes in Library Reference LR-I-221 were all the barcodes used in the activity sampling portion of the study, including both work sampling and time studies and quantitative data collection.

(b-c) Level 7 is the entry of the odometer reading numbers. This quantitative data is unrelated to the work sampling that is the subject of my testimony. The page of number barcodes is for the level 8 time study. The number is used to uniquely identify the time study event. The unique number is used by the study software to calculate the time duration of the time study. The software uses the

RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS RAYMOND TO
INTERROGATORIES OF ADVO, INC.

"STT" code time stamp and the "FIN" time stamp to calculate the amount of time
between.

RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS RAYMOND TO
INTERROGATORIES OF ADVO, INC.

(d)(i)

Data Level	Description	Bar Code	Bar Code Description	Comments
1 thru 7	General		ADVO/USPS-T13_90 (d) (i)	
1	Observer	OBS01	Multiple purposes	
2	State	CA	California	Multiple purposes
3	Unit	CY01 CY02 CY03 CY04	Multiple purposes Multiple purposes Multiple purposes Multiple purposes	
3.1	Route Number	Entry	Multiple purposes	Keyed entry of 4 digits
4	Subject Job Classification	JC01 JC02 JC03 JC04 JC05	Regular Carrier Utility Carrier PTF Part Time Temporary Employee Casual	Multiple purposes Multiple purposes Multiple purposes Multiple purposes Multiple purposes
5	Subject Present	SP01 SP02	Subject is Present End of Subject Study	Multiple purposes Multiple purposes
				Scan when subject is first sighted, ontime or late
6	Mileage	M01 M02	Mileage - N/A Enter Odometer Numbers	Multiple purposes Multiple purposes
				Total mileage traveled Enter start then finish at end of the day
8	Time Study			
8.1	Event Number	0000 0001	Not Applicable Events	Used for time study Used for time study
				Events 0001 to 9999
8.2	Event Status	STT FIN INT RES NAA	Start Finish Interrupted Resumed Not Applicable	Used for time study Used for time study Used for time study Used for time study Used for time study
				Starts task timing function Finish task timing Interrupted task timing Resume task timing
8.3	Task Type Mail Type	TT00 PT01 PT02 PT03 PT04	N/A AM Letters AM Flats AM Accountable AM Parcels	Used for time study Used for time study Used for time study Used for time study
				Not Applicable Inside letters handled in the AM Inside flat mail handled in the AM Inside accountables handled in the AM Inside parcels handled in the AM

RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS RAYMOND TO
INTERROGATORIES OF ADVO, INC.

	PT05	AM Mix	Used for time study	Inside Mixed Mail handled in the AM
	PT06	AM Admin	Used for time study	AM Administrative functions and Inside and Outside Clock
	PT07	PM Letters	Used for time study	Inside letters handled in the PM
	PT08	PM Flats	Used for time study	Inside flat mail handled in the PM
	PT09	PM Accountable	Used for time study	Inside accountables handled in the PM
	PT10	PM Mix	Used for time study	Inside Mixed Mail handled in the PM
	PT11	PM Admin	Used for time study	PM Administrative functions and Inside Clock at end of day
Delivery Type Reference counts to Business and Residential Deliveries	DT12	Curb	Used for time study	Curbside delivery
	DT13	Foot/Walking	Used for time study	Walking route delivery
	DT14	Dismount	Used for time study	Dismount delivery
	DT15	Central / Inside	Used for time study	Apartment type delivery inside
	DT16	Park and Loop	Used for time study	Park and Loop delivery
	DT17	Central / Outside	Used for time study	Condominium delivery outside
	DT18	VIM Room	Used for time study	Vertical Improved Mail delivery
Transportation Type	TT19	Jeep	Used for time study	
	TT20	LLV	Used for time study	
	TT21	1 or 2 Ton Truck	Used for time study	
	TT22	Pickup Truck	Used for time study	
	TT23	Walking - Push Cart	Used for time study	
	TT24	Bike	Used for time study	
	TT25	Bus - Public	Used for time study	
	TT26	Automobile	Used for time study	
	TT27	Elevator - Passenger	Used for time study	
	TT28	Walking	Used for time study	
	TT29	Train - Public	Used for time study	
8.4 Tasks	Y00	Not Applicable		
Inside Tasks Yxx	Y01	Clock (inside)	Used for time study	Start at clock in - fin at clock out
	Y02	Withdrawal / Return	Used for time study	Walk - pull case, drop off missorts and return
	Y03	Sort or Case	Used for time study	Sort letters or flats into case
	Y04	AM/PM Admin	Used for time study	Deposit 3849, Return Parcel, DPS error report
	Y05	Hot Case	Used for time study	Travel, pull, p/u hamper and return
	Y06	COA	Used for time study	All functions w/ Change of Address
	Y07	Pull Down	Used for time study	Pull down letter or flat case, band and load, setup relay
	Y08	Hot Case and Exit	Used for time study	Trvl to hot case, pull, seq., p/u DPS & clock out
Outside Tasks Pxx	P00	Clock (outside)	Used for time study	Start at clock out - fin at clock in

**RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS RAYMOND TO
INTERROGATORIES OF ADVO, INC.**

	P01	Basic	Used for time study	Delivery of mail during route
	P02	Accountable	Used for time study	Delivery of accountable w/i loop
	P03	Dismount Accountable	Used for time study	Delivery of accountable on curb / dismount route
	P04	LVR Accountable	Used for time study	Delivery of LVR w/i loop or dismount
	P05	Parcel	Used for time study	delivery of Parcel w/i loop
	P06	Dismount Parcel	Used for time study	Delivery of Parcel on curb route
	P07	Relay Restock	Used for time study	Reloading satchel on walking or park & loop
	P08	Unload - Setup Central	Used for time study	Unloading Vehicle during delivery route
	P09	Setup - vehicle	Used for time study	Re-arrange vehicle
	P10	Collection	Used for time study	Unloading collection box at street or apt.
Transportation Tasks Vxx	V01	Vehicle Inspection	Used for time study	Travel, inspect, Report and return
	V02	Load Vehicle	Used for time study	Travel, load and return hamper
	V03	Travel to 1st delivery	Used for time study	Vehicle moving to vehicle stop at 1st park point
	V04	Refueling	Used for time study	Vehicle stop at station to moving to route
	V05	Travel Between Points	Used for time study	Vehicle moving to vehicle stop at park point
	V06	Return to Unit	Used for time study	After last delivery and return to unit
	V07	Unload Vehicle	Used for time study	Unload raw mail and undelivered parcels

9 Event Quantities

**Counts for Mail
Type**

	PC00	Not Applicable	Used for time study	New level - Loop as often as needed Use this code to bypass to Work sampling
	PC01	Accountables	Used for time study	Number of accountables received
	PC02	Parcels	Used for time study	Number of parcels received
	PC03	Letters	Used for time study	Number of letters cased or withdrawn
	PC04	Flats	Used for time study	Number of flats cased or withdrawn
	PC05	Withdrawals	Used for time study	Number of passes made at withdrawal case
	PC06	Forms	Used for time study	Number of forms filled out in timing block
	PC07	Folded Flats	Used for time study	Number of Flats folded and sorted
	PC08	Delivery Points	Used for time study	Number of slots in case operation
	PC09	COA's	Used for time study	Number of Change of Address made
	PC10	Bends at Case	Used for time study	Number of Bends made by carrier in timing block
	PC11	Feet of mail	Used for time study	Number of trays placed in hamper after pulldown

**RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS RAYMOND TO
INTERROGATORIES OF ADVO, INC.**

Counts for Delivery Type	PC12	DPS	Used for time study	Number of trays of DPS Mail
	PC13	UBBM Quantity	Used for time study	Number of pcs of mail to UBBM throw to Tub
	PC14	Pulldown Bundles	Used for time study	Number of bundles generated at pulldown
	PC15	Paces Vehicle Inspection	Used for time study	Number of Paces used in inspecting Vehicle
	PC16	Missorts/CMUs	Used for time study	Number of pieces of mail the carrier places on the ledge while sorting - to be handled later
	PC17	Sequenced Flats	Used for time study	Number of Flats in delivery sequence
	DC01	Paces Inside	Used for time study	Number of paces in basic delivery timing block inside a building
	DC02	Paces Outside	Used for time study	Number of paces in basic delivery timing block outside on flat ground
	DC03	Paces Outside Obstructed	Used for time study	Number of paces in basic delivery timing block outside with obstructions or stairs
	DC04	Bends - Weighted	Used for time study	Number of bends made in delivery timing block w/ Loaded Satchel
	DC05	Bends - Unweighted	Used for time study	Number of bends made in delivery timing block w/o Satchel
	DC06	Doors / Gates	Used for time study	Number of doors opened in delivery timing block
	DC07	Forms	Used for time study	Number of forms filled out in delivery timing block
	DC08	Residential delivery points	Used for time study	Number of residential delivery points in delivery timing block
	DC09	Bundles	Used for time study	Number of bundles carrier method used
	DC10	Customer Interaction	Used for time study	Number of customer interactions in delivery timing block
	DC11	Pickups	Used for time study	Number of collections made in delivery timing block
	DC12	Dismounts	Used for time study	Number of dismounts required in delivery timing block
	DC13	Illegal Boxes	Used for time study	Number of illegal boxes in delivery timing block
	DC14	Business delivery points	Used for time study	Number of business delivery points in delivery timing block
	DC15	Missed delivery points	Used for time study	Number of delivery points skipped in delivery timing block
	DC16	Screen / Storm Doors	Used for time study	Number of Screen or Storm doors opened in delivery timing block
	DC17	Trays/Tubs unloaded	Used for time study	Number of trays and tubs unloaded at the end of day

Counts for Transportation Type

RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS RAYMOND TO
INTERROGATORIES OF ADVO, INC.

TC01	Miles	Used for time study	Number of miles between park points
TC02	Park Points	Used for time study	Number of park points in Park & Loop route
9.1 Quantity		Used for time study	Numeric entry of quantity for selected event

10 Work Sampling			
10 Location - Inside	L00	Not Applicable	Used for work sampling
	L01	Distribution Case	Used for work sampling
	L02	Hot Case	Used for work sampling
	L03	Work Station	Used for work sampling
	L04	Accountable Cage	Used for work sampling
	L05	Parcel Area	Used for work sampling
	L06	DPS Area	Used for work sampling
	L16	Other Work Station	Used for work sampling
	L18	In unit on route to	Used for work sampling
	L22	Time Clock	Used for work sampling
	L23	Throwback Case	Used for work sampling
	L24	In unit walking	Used for work sampling
	Location - Outside		
	L07	Dock	Used for work sampling
	L08	Vehicle	Used for work sampling
	L09	Park Point	Used for work sampling
	L10	Collection Box	Used for work sampling
	L11	Relay Box	Used for work sampling
	L12	Point of delivery	Used for work sampling
	L13	On Route	Used for work sampling
	L14	PBL	Used for work sampling
	L15	Misc	Used for work sampling
	L17	Gas Station	Used for work sampling
	L19	In vehicle at Stop/Light	Used for work sampling
	L20	In vehicle in traffic	Used for work sampling
	L21	Waiting while walking	Used for work sampling
	L22	Time Clock	Used for work sampling
11.1 Personal			
Non-Job Admin	A00	Not Applicable	
	A01	Subject Personal	Used for work sampling
	A02	Subject Break	Used for work sampling
	A03	Subject Lunch	Used for work sampling
	A04	Observer Personal	Used for work sampling
	B01	Safety Meeting	Used for work sampling
	B02	Service Meeting	Used for work sampling
	B03	Awards Meeting	Used for work sampling

**RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS RAYMOND TO
INTERROGATORIES OF ADVO, INC.**

Job Admin

B04	Union	Used for work sampling
B05	Training	Used for work sampling
C01	Survey	Used for work sampling
C02	Forms	Used for work sampling
C03	Supervisor Instructions	Used for work sampling
C04	Carrier Markup & Recond.	Used for work sampling
C05	Other - specify	Used for work sampling
C06	Vehicle Inspection	Used for work sampling

11.2 Delivery Type (new)

WT00	Not Applicable	
WT07	Inside	Used for work sampling
WT01	Foot	Used for work sampling
WT02	Curb	Used for work sampling
WT03	Park & Loop	Used for work sampling
WT04	Dismount	Used for work sampling
WT05	Central	Used for work sampling
WT06	Vim Room	Used for work sampling

11.3 Delivery Type Status

S00	Not Applicable	
S01	Business Inside	Used for work sampling
S02	Business Outside	Used for work sampling
S03	Residential Inside	Used for work sampling
S04	Residential Outside	Used for work sampling

11.4 Activities

T00	Not Applicable	
T01	Travel to 1st Delivery	Used for work sampling
T02	Travel b/t Delivery	Used for work sampling
T03	Travel b/t with Sort	Used for work sampling
T04	Return to Unit	Used for work sampling
T05	Walking	Used for work sampling
F01	Accountable	Used for work sampling
F02	Parcel	Used for work sampling
F03	Hardship	Used for work sampling
D08	Delay - Provide details	Used for work sampling
J01	Letters	Used for work sampling
J02	Flats	Used for work sampling
J03	Accountables	Used for work sampling
J04	Parcels	Used for work sampling
J05	DPS	Used for work sampling
J06	Mix	Used for work sampling
J07	Folded Flats	Used for work sampling
J08	Delivery / Collect	Used for work sampling Provide details for Box type next level 11.4.1
J09	Loading	Used for work sampling Vehicle or Satchel in the AM

**RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS RAYMOND TO
INTERROGATORIES OF ADVO, INC.**

J10	Unloading	Used for work sampling	Vehicle at the end of the day
J11	Setup	Used for work sampling	Rearranging vehicle or satchel during the day
D01	No Access to Box	Used for work sampling	
D02	Vehicle Breakdown	Used for work sampling	
D03	Mail Processing	Used for work sampling	
D04	Weather	Used for work sampling	
D05	Traffic/Detour	Used for work sampling	
D06	No Work	Used for work sampling	
D07	Other	Used for work sampling	

**11.4.1 Activity Detail
(new)**

H00	Not Applicable		
K00	Jeep	Used for work sampling	
K01	LLV	Used for work sampling	
K02	1 or 2 ton truck	Used for work sampling	
K03	Pickup / Van	Used for work sampling	
K04	Walking - Push Cart	Used for work sampling	
K05	Bike	Used for work sampling	
K06	Bus - Public	Used for work sampling	
K07	Automobile	Used for work sampling	
K08	Elevator - Passenger	Used for work sampling	
K09	Walking inside unit	Used for work sampling	
K10	Walking Outside on flat	Used for work sampling	
K11	Walking Outside Obstructed	Used for work sampling	
K12	Train - Public	Used for work sampling	
E01	Sort	Used for work sampling	
E02	PullDown	Used for work sampling	
E03	Mat'l Handling	Used for work sampling	
E04	Loop and Fan	Used for work sampling	
E05	Letter sort empty	Used for work sampling	Sorting letters into an empty case slot
E06	Letter sort partial	Used for work sampling	Sorting letters into a case slot with 1 or 2 letters
E07	Letter sort medium	Used for work sampling	Sorting letters into a case slot with 3 or more letters
E08	Letter sort full	Used for work sampling	Requires 2 hands to insert a letter into a slot
E09	Flat sort vertical	Used for work sampling	
E10	Flat sort horizontal	Used for work sampling	
E11	Flat sort sequenced	Used for work sampling	
H01	Illegal Mail Box	Used for work sampling	
H02	1 Handed Slot	Used for work sampling	
H03	2 Handed Slot	Used for work sampling	
H04	Slot below knees	Used for work sampling	
H05	Flat Receptacle	Used for work sampling	
H06	#1 Box	Used for work sampling	
H07	# 1-1/2 Box	Used for work sampling	

RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS RAYMOND TO
INTERROGATORIES OF ADVO, INC.

H08	#2 Box	Used for work sampling	
H09	1 Handed Slam	Used for work sampling	
H10	Drop	Used for work sampling	
H11	Gang Box	Used for work sampling	
H12	Central Inside	Used for work sampling	
H13	Central Outside	Used for work sampling	
H14	VIM Room	Used for work sampling	
G01	Public Relations	Used for work sampling	Number of words limited
G02	Service Rates	Used for work sampling	
G03	Directions	Used for work sampling	
G04	Excessive words Customer	Used for work sampling	Customer delays carrier to chat
G05	Excessive words Carrier	Used for work sampling	
I01	Parking Unavailable	Used for work sampling	
I02	Dogs	Used for work sampling	
I03	Railroad Crossing	Used for work sampling	
I04	Drawbridge	Used for work sampling	
I05	Union	Used for work sampling	
I06	Construction	Used for work sampling	
I07	Weather	Used for work sampling	
I08	Stuck in traffic	Used for work sampling	

12 Beeper Occurances

Carrier has a pager

Multiple purposes

Numeric entry of pager
occurrences during the day

13 Study Quantities

13	Item			
	R01	Temperature	Multiple purposes	Scan to input temperature at prescribed time
	R02	Humidity	Multiple purposes	Scan to input humidity at prescribed time
	R03	Wind	Multiple purposes	Scan to input wind speed at prescribed time
	R04	Rain	Multiple purposes	Scan to input rain at prescribed time
	R05	Snow	Multiple purposes	Scan to input snow at prescribed time
	R06	Bundle method	Multiple purposes	Scan to input carrier delivery method of bundles handled
	R07	Park Points per 1621	Multiple purposes	Scan to input number of park points allowed on route
	R08	Hail	Multiple purposes	Scan to input if hailing
	R09	Qty of DPS	Multiple purposes	
	R10	Am Qty of letters	Multiple purposes	
	R11	Am Qty of flats	Multiple purposes	
	R12	Carrier height in inches	Multiple purposes	
	R13	Carrier Age	Multiple purposes	
	R14	Carrier Outseam	Multiple purposes	
	R15	Smoker	Multiple purposes	Scan code and enter 1 in qty
	R16	Right or Left handed	Multiple purposes	Scan code and enter 1 for right, 2 for left

RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS RAYMOND TO
INTERROGATORIES OF ADVO, INC.

R17	Gender	Multiple purposes	Scan code and enter 1 for male, 2 for female
R18	Qty of Parcels	Multiple purposes	
R19	Qty of accountables	Multiple purposes	
R20	Carrier weight in pounds	Multiple purposes	
R21	Carrier forward reach in inches	Multiple purposes	
R23	Distance to clock	Multiple purposes	Paces to clock from carrier case
R24	Distance to Accountable Cage	Multiple purposes	Paces to Accountable cage from case
R25	Distance to hotcase	Multiple purposes	Paces to hotcase from carriers case
R26	Distance to Parcel hamper	Multiple purposes	
R27	Distance to Throwback case	Multiple purposes	
R28	Distance to Vehicle	Multiple purposes	
R29	Vehicle relocation to dock	Multiple purposes	
R30	Distance to dist. case 1	Multiple purposes	
R31	Distance to dist. case 2	Multiple purposes	
R32	Distance to dist. case 3	Multiple purposes	
R33	Distance to dist. case 4	Multiple purposes	
R34	Distance to dist. case 5	Multiple purposes	
R35	Distance to VIM hamper	Multiple purposes	
R36	Distance to Breakroom	Multiple purposes	
R37	Distance to Restroom	Multiple purposes	
R38	Distance to Supervisors Desk	Multiple purposes	
R39	Distance to 1st swinging exit door	Multiple purposes	
R40	Quantity of SPR's	Multiple purposes	
R41	Quantity of DAL cards	Multiple purposes	
R42	Quantity of pre sequenced mail	Multiple purposes	
R43	Method 3+1 used	Multiple purposes	
R44	Quantity UBBM	Multiple purposes	
R45	Quantity of Missorts	Multiple purposes	
R48	3999 Type 1	Multiple purposes	
R49	3999 Type 2	Multiple purposes	
R50	3999 Type 3	Multiple purposes	
R51	3999 Type 4	Multiple purposes	
R52	3999 Type 5	Multiple purposes	
R53	3999 Type 6	Multiple purposes	
R54	3999 Type 7	Multiple purposes	
R55	3999 Type 8	Multiple purposes	
R56	Weight of empty satchel	Multiple purposes	
R57	Weight of loaded satchel	Multiple purposes	
R58	DPS out of sequence	Multiple purposes	
R59	DPS missorted to route	Multiple purposes	
R60	Quantity of delivery points given away	Multiple purposes	

RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS RAYMOND TO
INTERROGATORIES OF ADVO, INC.

R61	Number of trays used	Multiple purposes
R62	Number of tubs used	Multiple purposes

13.1 Quantity

Multiple purposes

Numeric entry relating to scan at
13

(d)(ii) Only one scanner is used at a time. The observers had several barcode
scanners with them through the day. The additional scanners are carried as
backups should a scanner be damaged or the battery run low.

||

RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS RAYMOND TO
INTERROGATORIES OF ADVO, INC.

ADVO/USPS-T13-91. In LR USPS I-221 (Engineered Standards Book of Barcodes), Level 6 is a scan for the starting odometer reading on the delivery vehicle.

(a) Was this intended to be entered at the start of each route-day? Please explain.

(b) Was there also a scan for the odometer reading at the end of the day? Please identify.

RESPONSE:

Note that the quantity data at issue in this question is unrelated to the work sampling that is the subject of my testimony.

(a) The observers had the option to enter this data at the start of the day, or to write the odometer reading on the comment sheet and then at the end of the day enter both the starting and ending odometer readings.

(b) By scanning the Level 6 code at anytime allowed for entry of the odometer reading. Later, during the analysis portion of the project, the mileage was calculated.

RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS RAYMOND TO
INTERROGATORIES OF ADVO, INC.

ADVO/USPS-T13-92: With respect to the codes in LR USPS I-221 (Engineered Standards Book of Barcodes),

(a) There are two page 3s one is for the "Inside Study" and the other is for the "Outside Study." Please confirm that the data relating to these barcodes were used to develop the Work Standards. If this is incorrect, please explain what these data were used for.

(b) There are two page 4s one is for the "Inside Work Sample" and the other is for the "Outside Work Sample." Please confirm that the data relating to these barcodes were used to develop the work/activities sampling data. If this is incorrect, please explain what these data were used for.

(c) Please confirm that the data for the "Inside Study" and the "Inside Work Sample" were both collected on the route-days included in your Engineered Standards Database (LR I-163). If this is incorrect, please explain when each of these types of data were collected.

(d) Please confirm that the data for the "Outside Study" and the "Outside Work Sample" were both collected on the route-days included in your Engineered Standards Database (LR I-163). If this is incorrect, please explain when each of these types of data were collected.

RESPONSE:

(a) Not confirmed. Time study data were not used to develop the time standards ultimately developed for the Postal Service. Note also that "Inside Study" and "Outside Study" relate to time studies that are not related to the work sampling that is the subject of my testimony.

The two page 3's refer to inside and outside data collection. To maintain the data collection hierarchy levels 8 through 13 for both inside and outside time study and work sampling the pages were numbered in this method. The work standards that were established were based on a predetermined work measurement system called MOST®. The work sampling data collected allowed

II
RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS RAYMOND TO
INTERROGATORIES OF ADVO, INC.

for the application to include a percent delay factor into the predetermined system.

(b) The two page 4s refer to inside and outside data collection. To maintain the data collection hierarchy levels 8 through 13 for both inside and outside time study and work sampling, the pages were numbered in this method. The work standards that were established were based on a predetermined work measurement system called MOST®. The work sampling data collected allowed for the application to include a percent delay factor into the predetermined system.

(c) *Confirmed, the routes were observed for the entire day.*

(d) Confirmed.

RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS RAYMOND TO
INTERROGATORIES OF ADVO, INC.

ADVO/USPS-T13-93. In LR USPS I-221 (Engineered Standards Book of Barcodes), code levels 8.2 through 11.4.1 are divided between "Inside" and "Outside."

- (a) Please confirm that the only codes given in your testimony (other than the codes associated with unit/route/job classification) are the code levels 10 through 11.4.1 of the "Outside Study" set. If this is incorrect, please indicate where in your testimony these other codes can be found.
- (b) Please refer to your responses to MPA/USPS-T13-22 and 23, where you explain the points at which the outside activities of letter carriers began and ended. Are these points the breakpoints for "Inside Study" and "Outside Study?" If not, please explain fully the relationship between the outside activities and the "Outside Study" codes (i.e., are there "Outside Study" coded tallies that were not included in the LR I-163 database? Should some "Inside Study" coded tallies be included in the LR I-163 database?)
- (c) Please confirm that there were "Inside Study" codes for "inside clock" and "outside clock," were any of these codes recorded and, if so, why weren't these used for those particular route days?

RESPONSE:

- (a) Confirmed.
- (b) No. The terms "Inside Study" and "Outside Study" refer strictly to barcodes used for time studies, whereas my answer to questions 22 and 23 was in the context of work sampling. Since the time studies have nothing to do with the work sampling that is the subject of my testimony, they were not, and should not, be included in LR-I-163.
- (c) Confirmed that there are codes under "Inside Study" that are used for time studies (not the work sampling that is the subject of my testimony) of the time the carrier is clocked in the office portion of his workday (inside clock) and clocked in to the outside portion of the workday (outside clock). The term "Inside Clock" is used when the carrier is clocking into work in the postal unit. The term "Outside Clock" is used when the carrier is clocking onto the street

RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS RAYMOND TO
INTERROGATORIES OF ADVO, INC.

delivery portion of the day. The barcode sheet was formatted in this fashion to allow for easier recording of the observation of clocking onto the street.

The time study requirements made on the observers were to capture as many time studies in a day as possible. In turn there may be several days in the overall database that do not contain time studies for the "Inside Clock" and "Outside Clock".

RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS RAYMOND TO
INTERROGATORIES OF ADVO, INC.

ADVOIUSPS-T13-94. Please explain the Level 8.2 Status codes (i.e., Start, Finish, Interrupt, Resume, N/A) displayed in LR I-221 (the Engineering Standards Book of Barcodes).

(a) What was their purpose?

(b) When were they used?

(c) When there was an interruption, did the Videx II continue to beep and the data collector continue to record tallies as indicated in the 8.2 codes, or did the scanner have to be restarted?

(d) Why weren't those codes included in the LR I-163 database?

RESPONSE:

(a-b) Start is scanned when the observer wants to start a time study. Finish is scanned when the observer completes a time study. Interrupt and resume are used during certain types of time studies to allow the observer to break and then continue the time study later. The N/A barcode allows the observer to bypass the time study portion of data collection and proceed to the work sampling portion of the data collection. Note that time studies have nothing to do with the work sampling that is the subject of my testimony.

(c) The interruption is related to time study. The six minute beep is not associated in any way with this barcode. The scanner continued to beep every six minutes through out the entire day, regardless. Once the scanner is removed from the docking station it is active though out the entire day. Note that time studies have nothing to do with the work sampling that is the subject of my testimony.

RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS RAYMOND TO
INTERROGATORIES OF ADVO, INC.

(d) The time study data collected using the start, stop, interrupt and resume functions is not used by witness Baron. The time study data is a separate function from the work sampling data used by witness Baron.

RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS RAYMOND TO
INTERROGATORIES OF ADVO, INC.

ADVO/USPS-T13-95. For LR I-221 (Engineering Standards Book of Barcodes), please explain why there are "Inside Study" codes for the following:

- (a) Bus - Public (TT25)
- (b) Train/Subway (TT29)
- (c) Load Vehicle, Return Hamper (V02)
- (d) Travel to 1st Delivery V03)
- (e) Refueling (V04)
- (f) Travel b/t Park Points (V05)
- (g) Return to Unit (V06)
- (h) Unload Vehicle at End (V07)

RESPONSE:

(a-h) Note that these codes are used for time studies that are not the subject of my testimony. The arrangement of the barcodes on the data collection sheets is to allow the ease of time studying of events that cause the carrier to move from inside events to outside events. The carrier performs a vehicle inspection in the morning while on the "Inside Clock". Loading the vehicle occurs with the carrier moving from inside the postal unit to the loading dock. A similar situation occurs at the end of the day for unload the vehicle and return to unit time studies.

Arrangement of the time study codes on the barcode scanning sheets was for the ease of use by the observers and are not reflected in the Library Reference LR-I-163 because they are not related to the work sampling that is the subject of my testimony.

RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS RAYMOND TO
INTERROGATORIES OF ADVO, INC.

ADVO/USPS-T13-96. For LR I-221 (Engineering Standards Book of Barcodes), please confirm the following and explain why it occurs:

(a) Both the "Inside Study" and "Outside Study" sets of codes have the same codes for Vehicle Types (Level 8.3 TT codes) and Task Types (Level 8.4 V codes).

(b) Both the "Inside Study" and "Outside Study" sets of codes have many of the same Level 10 Location codes (i.e., dock, vehicle, misc, PBL).

RESPONSE:

Again, note that the "Inside Study" and "Outside Study" codes have nothing to do with the work sampling that is the subject of my testimony, and relate to separate time studies.

(a) Confirmed. The arrangement of the barcodes on the data collection sheets is to allow the ease of time studying of events that cause the carrier to move from inside events to outside events. The carrier performs a vehicle inspection in the morning while on the "Inside Clock". Loading the vehicle occurs with the carrier moving from inside the postal unit to the loading dock. Arrangement of the codes on the was for the ease of use by the observers and are not reflected in the Library Reference LR-I-163 because they are not related to the subject of my testimony.

(b) Not confirmed. I do not understand your question. "Inside Study" and "Outside Study" codes relate to time studies, while Level 10 location codes relate to work sampling. They have nothing to do with each other.

RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS RAYMOND TO
INTERROGATORIES OF ADVO, INC.

ADVO/USPS-T13-97. For LR I-221 (Engineering Standards Book of Barcodes), please explain fully the definitional differences between Outside Study Level 8.3 Delivery Types (I-f and DT codes) and Level 11.2 Outside Delivery Type Codes (WT codes), and explain why there are two sets of codes.

RESPONSE:

There are no definitional differences between Outside Study Level 8.3 and 11.2 Outside Delivery Type Codes. However, 8.3 level is used to time study events, whereas the 11.2 level is for work sampling activities.

RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS RAYMOND TO
INTERROGATORIES OF ADVO, INC.

ADVO/USPS-T13-98. In the Outside Study and Work Sample codes listed in LR I-221 (Engineering Standards Book of Barcodes), please explain:

(a) The definitional difference between the Level 8.4 "Outside Task" codes P codes for items such as various types of deliveries, unloading vehicle, re-arranging vehicle, restocking satchel) and the Level 11.4.1 "Outside Activities" codes (e.g., J codes for delivery/collection and setup; T code for travel between deliveries).

(b) The circumstances when the data collectors entered each Level 8.4 code.

(c) How each of the Level 8.4 P codes relate to each of the Level 11.4 Work Activity codes.

RESPONSE:

(a) I don't understand your question. I cannot discern any matches between Level 8.4 "Outside Task" codes and the Level 11.4.1 "Outside Activities" codes. Note that the 8.4 level codes are used to time study events, whereas the 11.4.1 codes are used for work sampling activities. Time study records a quantity of events that occur over time. Work sampling records a frequency of occurrence. Note that the time studies have nothing to do with the work sampling that is the subject of my testimony.

(b) The 8.4 level codes are related to the 8.3 level codes for time studying events. The 8.4 level codes define the task that is occurring from the code chosen in the 8.3 level. The following list describes the use of these codes:

TaskType Code	Task Type	Tasks Code	Tasks	Time study timed:
DT12	Curb	P01	Basic	Basic delivery to a group of curb type deliveries
DT12	Curb	P02	Accountable	Delivery of an accountable(s) to curb type deliveries

RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS RAYMOND TO
INTERROGATORIES OF ADVO, INC.

DT12	Curb	P03	Dismount Acct'	Dismount delivery of accountable(s) to curb type deliveries
DT12	Curb	P05	Parcel	Parcel(s) delivery to curb type deliveries
DT12	Curb	P06	Dismount Parcel	Dismount parcel(s) delivery to curb type deliveries
DT12	Curb	P09	Setup Vehicle	Vehicle setup on a curb route
DT12	Curb	P10	Collection	Servicing a collection box on a curb type route
DT12	Curb	V05	Travel b/t Pnts	Travel between points on a curb type route
DT12	Curb	V06	Return to Unit	Returning to postal unit on a curb type route
DT12	Curb	V07	Unload Vehicle	Unloading the vehicle on a curb type route
DT12	Curb	Y00	N/A	
DT13	Foot/Walking	P01	Basic	Basic delivery to a group of deliveries on a walk out route
DT13	Foot/Walking	P02	Accountable	Delivery of an accountable(s) on a walk out route
DT13	Foot/Walking	P07	Relay Restock	Restocking the satchel on a walk out route
DT13	Foot/Walking	V06	Return to Unit	Returning to postal unit on a walk out route
DT14	Dismount	P01	Basic	Basic dismount delivery
DT14	Dismount	P02	Accountable	Delivery of an accountable(s) by dismounting the vehicle
DT14	Dismount	P04	LVR Accountable	Dismount delivery of accountable(s) to a Large Volume Receiver
DT14	Dismount	P05	Parcel	Dismount delivery of parcel(s)
DT14	Dismount	P09	Setup Vehicle	Setup of the vehicle during a dismount portion of a route
DT14	Dismount	P10	Collection	Servicing a collection box on a dismount portion of a route
DT15	Central/Inside	P01	Basic	Basic delivery to a inside central group of deliveries
DT15	Central/Inside	P02	Accountable	Delivery of an accountable(s) on the inside central portion of a route
DT15	Central/Inside	P05	Parcel	Delivery of a parcel(s) on the inside central portion of a route
DT15	Central/Inside	P07	Relay Restock	Restocking the satchel on the inside central portion of a route
DT15	Central/Inside	P10	Collection	Service the collection box at the inside central location
DT15	Central/Inside	Y00	N/A	
DT16	Park and Loop	P01	Basic	Basic delivery of a group of deliveries on a Park and Loop portion of a route
DT16	Park and Loop	P02	Accountable	Delivery of an accountable(s) while on the Park and Loop portion of a route
DT16	Park and Loop	P03	Dismount Acct'	Dismount delivery of an accountable(s) while on the Park and Loop portion of a route
DT16	Park and Loop	P05	Parcel	Delivery of a parcel(s) while on the Park and Loop portion of a route
DT16	Park and Loop	P06	Dismount Parcel	Dismount delivery of a parcel(s) while on the Park and Loop portion of a route
DT16	Park and Loop	P07	Relay - Restock	Restocking the satchel while on the Park and Loop portion of a route

RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS RAYMOND TO
INTERROGATORIES OF ADVO, INC.

DT16	Park and Loop	P09	Setup Vehicle	Setup of the vehicle while on the Park and Loop portion of a route
DT16	Park and Loop	P10	Collection	Servicing a collection box while on the Park and Loop portion of a route
DT16	Park and Loop	Y00	N/A	
DT17	Central/Outside	P01	Basic	Basic delivery to a inside central group of deliveries
DT17	Central/Outside	P02	Accountable	Delivery of an accountable(s) on the inside central portion of a route
DT17	Central/Outside	P05	Parcel	Delivery of a parcel(s) on the inside central portion of a route
DT17	Central/Outside	P06	Dismount Parcel	Dismount delivery of a parcel(s) while on the outside central portion of a route
DT17	Central/Outside	P07	Relay - Restock	Restocking the satchel on the inside central portion of a route
DT17	Central/Outside	Y00	N/A	
PT01	AM Letters	Y00	N/A	
PT01	AM Letters	Y02	Withdrawal/Retrn	Withdrawing from the ledge and returning letter missorts to the case with paces
PT01	AM Letters	Y02	Withdrawl	Withdrawl of bulk letter mail from the distribution case with paces to and from
PT01	AM Letters	Y03	Sort Or Case	Sorting and casing letters in the am at the carrier workstation
PT01	AM Letters	Y05	Hot Case	Obtaining mail from the hotcase with paces to and from
PT01	AM Letters	Y07	Pulldown	Pulling down cased letter mail from the carriers workstation
PT02	AM Flats	Y00	N/A	
PT02	AM Flats	Y02	Withdrawal/Retrn	Withdrawing from the ledge and returning flat missorts to the case with paces
PT02	AM Flats	Y02	Withdrawl	Withdrawl of bulk flat mail from the distribution case with paces to and from
PT02	AM Flats	Y03	Sort Or Case	Sorting and casing flats in the am at the carrier workstation
PT02	AM Flats	Y07	Pulldown	Pulling down cased flat mail from the carriers workstation
PT03	AM Accountable	Y00	N/A	
PT03	AM Accountable	Y02	Withdrawal/Retrn	Withdrawing from the ledge and returning accountables to the cage
PT03	AM Accountable	Y02	Withdrawl	Obtaining accountable from the cage or rolling accountable cage
PT03	AM Accountable	Y03	Sort Or Case	Sorting or casing accountable mail to the carriers workstation
PT03	AM Accountable	Y04	AM/PM Admin	Completing forms required for accountables
PT04	AM Parcels	V02	Load Vehicle	Loading parcel(s) to the vehicle in the am
PT04	AM Parcels	Y00	N/A	
PT04	AM Parcels	Y02	Withdrawal/Retrn	Returning parcel(s) missorted to the route to the clerk

RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS RAYMOND TO
INTERROGATORIES OF ADVO, INC.

PT04	AM Parcels	Y02	Withdrawl	Obtaining the parcel hamper in the postal unit
PT04	AM Parcels	Y03	Sort Or Case	Sorting or arranging parcels in delivery order
PT04	AM Parcels	Y07	Pulldown	Pulling down parcel(s) from the carriers workstation
PT05	AM Mix	Y00	N/A	
PT05	AM Mix	Y02	Withdrawal/Retrn	Withdrawal and return of mixed (letters and flats) missorted to the route
PT05	AM Mix	Y02	Withdrawl	Withdrawl of mixed mail from the distribution case
PT05	AM Mix	Y03	Sort Or Case	Sorting or casing mixed mail to the carriers workstation
PT05	AM Mix	Y05	Hot Case	Obtaining mixed mail from the hotcase paces to and from
PT05	AM Mix	Y07	Pulldown	Pulling down mix mail from the carriers workstation
PT06	AM Admin	P00	Clock(outside)	Total time of the street portion of the carriers day
PT06	AM Admin	Y00	N/A	
PT06	AM Admin	Y01	Clock (inside)	Total time of the office portion of the carriers day
PT06	AM Admin	Y04	AM/PM Admin	Administration time in the office
PT06	AM Admin	Y06	COA 's	Time to complete the change of address forms
PT07	PM Letters	Y03	Sort Or Case	Sorting or casing letters at the end of the day
PT07	PM Letters	Y07	Pulldown	Pulling down letters at the end of the day
PT08	PM Flats	Y03	Sort Or Case	Sorting or casing flats at the end of the day
PT08	PM Flats	Y07	Pulldown	Pulling down flats at the end of the day
PT09	PM Accountable	Y00	N/A	
PT09	PM Accountable	Y04	AM/PM Admin	Returning "arrow" key and undelivered accountables at the end on the day
PT10	PM Mix	Y00	N/A	
PT10	PM Mix	Y03	Sort Or Case	Sorting or casing mixed mail at the end of the day
PT10	PM Mix	Y07	Pulldown	Pulling down mixed mail at the end of the day
PT11	PM Admin	P00	Clock(outside)	Total time of the street portion of the carriers day
PT11	PM Admin	Y00	N/A	
PT11	PM Admin	Y01	Clock (inside)	Total time in the office after completing the street delivery
PT11	PM Admin	Y04	AM/PM Admin	Administration time in the office at the end of the day
TT00	N/A	Y00	N/A	
TT19	Jeep	P09	Setup Vehicle	Moving tubs and trays in the jeep during the delivery cycle
TT19	Jeep	V01	Vehicle Inspect	Inspection of a jeep including paces to and from
TT19	Jeep	V02	Load Vehicle	Loading of a jeep with mail and parcels
TT19	Jeep	V03	Trav to 1st Delv	Travel to the first delivery point in a jeep
TT19	Jeep	V04	Refueling	Refueling of a jeep
TT19	Jeep	V05	Travel b/t Pnts	Travel between points in a jeep
TT19	Jeep	V06	Return to Unit	Returning to unit in a jeep
TT19	Jeep	V07	Unload Vehicle	Unloading empty trays and tubs from a jeep at the end of the day
TT19	Jeep	Y00	N/A	

**RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS RAYMOND TO
INTERROGATORIES OF ADVO, INC.**

TT20	LLV	P09	Setup Vehicle	Moving tubs and trays in the Long Life Vehicle (LLV) during the delivery cycle
TT20	LLV	V01	Vehicle Inspect	Inspection of a LLV including paces to and from
TT20	LLV	V02	Load Vehicle	Loading of a LLV with mail and parcels
TT20	LLV	V03	Trav to 1st Delv	Travel to the first delivery point in a LLV
TT20	LLV	V04	Refueling	Refueling of a LLV
TT20	LLV	V06	Return to Unit	Returning to unit in a LLV
TT20	LLV	V07	Unload Vehicle	Unloading empty trays and tubs from a LLV at the end of the day
TT20	LLV	Y00	N/A	
TT21	1 or 2 Ton	V01	Vehicle Inspect	Inspection of a 1 or 2 ton truck including paces to and from
TT21	1 or 2 Ton	V02	Load Vehicle	Loading of a 1 or 2 ton truck with mail and parcels
TT21	1 or 2 Ton	V03	Trav to 1st Delv	Travel to the first delivery point in a 1 or 2 ton truck
TT21	1 or 2 Ton	V05	Travel b/t Pnts	Travel between points in a 1 or 2 ton truck
TT21	1 or 2 Ton	V06	Return to Unit	Returning to unit in a 1 or 2 ton truck
TT22	Pickup / Van	V02	Load Vehicle	Loading of a pickup truck or van with mail and parcels
TT22	Pickup / Van	V03	Trav to 1st Delv	Travel to the first delivery point in a pickup truck or van
TT22	Pickup / Van	V05	Travel b/t Pnts	Travel between points in a pickup truck or van
TT22	Pickup / Van	V06	Return to Unit	Returning to unit in a pickup truck or van
TT23	Walk - Push Cart	V03	Trav to 1st Delv	Traveling to first delivery point by walking with a push cart
TT23	Walk - Push Cart	V06	Return to Unit	Returning to the postal unit by walking with a push cart
TT25	Bus - Public	V03	Trav to 1st Delv	Traveling to the first delivery point on a bus
TT25	Bus - Public	V06	Return to Unit	Returning to the postal unit on a bus
TT26	Automobile	V06	Return to Unit	Returning to the postal unit in a car
TT27	Elevator - Passn	Y00	N/A	Riding in a elevator
TT28	Walking	V03	Trav to 1st Delv	Traveling to the first delivery on a walk out route with satchel
TT28	Walking	V06	Return to Unit	Returning to the postal unit on a walk out route

(c) There is no intended relationship between these codes. One is used for time studies, the other for work sampling.

ADVO/USPS-T13-99. Consider the barcodes listed in LR I-221 (Engineering
Studies Book of Barcodes).

(a) When you assigned tallies among the STS classifications, did you use
any coded or written information other than the Outside Study Codes 10
through 11.4.1 included in LR I-163? If so, please explain fully.

(b) If you did not use the Level 8.2 through Level 9.1 Outside Study
information for purposes of assigning tallies among the STS
classifications, please explain why you ignored that information.

(c) Why did you exclude the Level 8.2 through Level 9.1 Outside Study
information from the LR I-163 database? Please explain.

RESPONSE:

(a) Other information such as observer comments were used to determine

individual tallies that could not be easily classified. Approximately 90 percent of
the tallies recorded fell nicely into the STS categories.

(b) This information pertained to time studies unrelated to the work sampling at
issue in my testimony.

(c) Please see response to ADVO/USPS-T13-97 above. Time study and work
sampling provide two different but similar pieces of information. Witness Baron
only required the work sampling tallies to complete his STS model.

RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS RAYMOND TO
INTERROGATORIES OF ADVO, INC.

ADVO/USPS-T13-100. Please refer to the Level 13 barcodes listed in LR I-221 (Engineering Studies Book of Barcodes).

(a) For each route-day, how often were each of these items identified and counted? Please specify by each code.

(b) Provide a complete definition for each item.

(c) Are these the manual entries which you describe in response to MPA/USPS-T13-43? Please explain.

RESPONSE:

Note that the Level 13 codes are unrelated to the work sampling that is the subject of my testimony.

(a-b) R01 Temperature – once per hour – the temperature in degrees farenheight.

R02 Humidity – once per hour – humidity in percent.

R03 Wind – when wind occurred, once per hour

R04 Rain – when rain occurred, once per hour

R05 Snow – when snow occurred, once per hour

R06 Hail – when hail occurred, once per hour

Count Items:

R09 Qty of DPS mail – once per day – quantity of Delivery Point
Sequenced mail for the day.

R10 Am qty of letters – once per day – quantity of letters cased in the morning.

RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS RAYMOND TO
INTERROGATORIES OF ADVO, INC.

R11 AM qty of flats – once per day – quantity of flats cased in the morning.

R18 Qty of parcels – once per day – quantity of parcels for the day.

R19 Qty of Accountables – once per day – quantity of accountables for the day.

R40 Qty of SPR's – once per day – quantity of small parcels or rolls for the day.

R41 Qty of ADVO's – once per day – quantity of detached address labels cased in the morning.

R59 DPSMsort2Rout – once per day – quantity of delivery point sequenced mail that was missorted to the route for the day.

R58 DPS/out/of/Seq – once per day quantity of delivery point sequenced mail that was out of sequence on the route for the day.

R42 Qty Pre-Seq'd – once per day – quantity of pre-sequenced mail on the route for the day.

R44 Qty UBBM – once per day – quantity of undeliverable bulk business mail on the route for the day.

R45 Qty Missorts – once per day – quantity of mail missorted by the clerks to the route for the day.

R56 Empty Satchel – once per day – the weight of an empty satchel

R57 Wgt'd Satchel – As often as possible through the day – the weight of the satchel loaded with mail prior to delivering a loop.

RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS RAYMOND TO
INTERROGATORIES OF ADVO, INC.

R06 Bundle Method – once per day – the bundle method used by the carrier, typically a one, two or three bundle method was used.

R12 Carrier Hgt In. – once per day if possible – the carriers height in inches.

R13 Carrier Age – once per day if possible – the carriers age in years.

R14 Carrier Outseam – once per day if possible – the length of the carriers outseam in inches.

R15 Smoker = 1 – once per day - the observers entered a 1 in the scanner if the carrier was a smoker.

R16 1=RH 2=LH – once per day – the observers entered a 1 if the carrier was right handed and a 2 if the carrier was left handed.

R17 1=M 2=F – once per day – the observers entered a 1 if the carrier was a male or a 2 if the carrier was a female.

R62 # of tubs – once per day if possible – the number of tubs used on the route for the day.

R61 # of trays – once per day if possible – the number of trays used on the route for the day.

R20 Subj Wgt. Lbs – once per day if possible – the carriers weight in pounds.

R21 Subj. Reach – once per day if possible – the carrier reach in inches.

R43 Method 3+1 used – once per day if possible – a 1 was entered in the scanner if the carrier used the 3+1 bundle method.

RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS RAYMOND TO
INTERROGATORIES OF ADVO, INC.

Distances from work station to:

R23 Clock – once per day – number of paces to the time clock.

R24 Acc'table cage – once per day – number of paces to the accountable cage.

R25 Hot Case – once per day - number of paces to the to the hot case.

R26 Parcel Hamper – once per day- number of paces to the parcel hamper.

R27 Throwback case – once per day- number of paces to the throwback case.

R28 Vehicle – once per day – number of paces to where the vehicle was parked.

R29 Reloc Veh 2 Doc – once per day if occurred – number of paces the vehicle to relocate the vehicle for loading

R30 Distr Case1 – once per day – the number of paces to the first distribution case.

R31 Distr Case2 – once per day if it exists – the number of paces to the second distribution case.

R32 Distr Case3 – once per day if it exists – the number of paces to the third distribution case.

R33 Distr Case4 – once per day if it exists – the number of paces to the fourth distribution case.

R34 Distr Case5 – once per day if it exists – the number of paces to the fifth distribution case.

RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS RAYMOND TO
INTERROGATORIES OF ADVO, INC.

R35 Vim Hamper – once per day if it exists – the number of paces to the vertical improved mail hamper.

R36 Breakroom – once per day – the number of paces to the breakroom.

R37 Restroom – once per day – the number of paces to the restroom.

R38 Supervisor Desk – once per day – the number of paces to the supervisor's desk.

R39 1st Swing Door – once per day – the number of paces to the first swinging exit door.

3999X items:

R48 3999 type 1 – once per day – the number of residential other deliveries on the USPS form 3999X.

R49 3999 type 2 – once per day – the number of residential curb deliveries on the USPS form 3999X.

R50 3999 type 3 – once per day – the number of residential neighborhood delivery and collection box units (NDCBU's) on the USPS form 3999X.

R51 3999 type 4 – once per day – the number of residential central deliveries on the USPS form 3999X

R52 3999 type 5 – once per day - the number of business other deliveries on the USPS form 3999X.

R53 3999 type 6 – once per day - the number of business curb deliveries on the USPS form 3999X.

RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS RAYMOND TO
INTERROGATORIES OF ADVO, INC.

R54 3999 type 7 – once per day – the number of business neighborhood delivery and collection box units (NDCBU's) on the USPS form 3999X.

R55 3999 type 8 – once per day - the number of business central deliveries on the USPS form 3999X.

R60 DelPtGvnAway – once per day if it occurred – the number of delivery point given away from the route on the day observed.

R07 Park Pts – once per day – the number of park points used on the route on the day observed.

(c) Yes, the Videx barcode scanner has a numeric key pad that once an R code listed above is scanned the scanner prompts the observer to enter a number.

DECLARATION

I, Donald M. Baron, declare under penalty of perjury that the foregoing answers are true and correct to the best of my knowledge, information, and belief.

Donald M. Baron

Date: 4-13-00

CERTIFICATE OF SERVICE

I hereby certify that I have this day served the foregoing document upon all participants of record in this proceeding in accordance with section 12 of the Rules of Practice.


Richard T. Cooper

475 L'Enfant Plaza West, S.W.
Washington, D.C. 20260-1137
April 13, 2000