

BEFORE THE
POSTAL RATE COMMISSION
WASHINGTON, D.C. 20268-0001

POSTAL RATE AND FEE CHANGES
PURSUANT TO PUBLIC LAW 108-18

Docket No. R2005-1

RESPONSES OF UNITED STATES POSTAL SERVICE WITNESS McCRERY
TO INTERROGATORIES OF DOUGLAS F. CARLSON
[DFC/USPS-T29-1-11]
(May 9, 2005)

The United States Postal Service hereby provides its responses to above-listed interrogatories of the Douglas F. Carlson, filed on April 25, 2005. Each interrogatory is stated verbatim and is followed by the response.

Respectfully submitted,

UNITED STATES POSTAL SERVICE

By its attorneys:

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May 9, 2005

Response of Postal Service Witness Marc McCrery
To Interrogatories Posed by Douglas F. Carlson

DFC/USPS-T29-1. Please refer to your testimony at page 4, lines 2–3. Are you aware that some P&DC's routinely operate the AFCS in a "lift everything" mode (i.e., the AFCS lifts both OCR-readable and script mail)?

RESPONSE:

Yes. It has been brought to my attention that all AFCS equipment is expected to be run in the "lift-everything" mode before the end of this fiscal year.

Response of Postal Service Witness Marc McCrery
To Interrogatories Posed by Douglas F. Carlson

DFC/USPS-T29-2. Please refer to your testimony at page 4, lines 11–13.

- a. Please describe how the ink-jet canceller (IJC) will automate the cancellation process.
- b. Please provide a nationwide rollout schedule for the IJC.
- c. Please estimate the cost savings that the Postal Service expects to realize from the IJC.
- d. Are the cost savings of the IJC factored into test-year mail-processing costs?

RESPONSE:

- a. The current AFCS cancellation process is performed in a mechanical manner using an inkpad and a rubber stamp. The AFCS has a rotating stamp die that transfers cancellation ink onto the stamp. Each day, the stamp dies are manually updated with the current date. The inkjet cancellation upgrade will automate the AFCS cancellation process by replacing the current manual update with inkjet printers that spray the cancellation information onto the mail piece. Accordingly, manual updating of the date on the rotating stamp each day will be eliminated.
- b. Deployment of the IJC is expected to begin summer 2005. The deployment schedule attached lists the facilities scheduled to receive the IJC, however, there are no firm dates because they are in the process of revision.
- c. The national savings (i.e., work hour reduction) associated with the IJC modification are 62,585 maintenance work hours or approximately \$3.01 million/year in FY 2006 dollars.
- d. Yes. The IJC upgrade is part of the AFCS Improvement Program, so the savings associated with IJC are expected to be partially realized in FY 2006 with the remainder expected in FY 2007.

AFCS-IJC Deployment Schedule

Area	Site Name	Street Adress	City	State	Zip	Zip+4		Videojet Build Complete Date	Videojet Ship Date	AFCS	Comments
HQ	NCED	2701 East Imhoff	Norman	OK	73071	9506	Pre-pilot			9	
							Pre-pilot			Spares	
							Pilot 1				
CM	Northern Virginia (Merrifield) VA	8409 Lee Highway	Merrifield	VA	22081	9341	Pilot 2			7	
HQ	Engineering	8403 Lee Highway	Merrifield	VA	22082	8101				1	
HQ	MTSC	600 W Rockcreek Rd	Norman	OK	73070	1600				1	
							Pilot 3				
PA	Margaret L Sellers (San Diego) CA	11251 Rancho Carmel Drive	San Diego	CA	92199	9731				11	
GL	Saint Louis MO	1720 Market Street	Saint Louis	MO	63155	9731				10	
SE	Orlando FL	10401 Post Office Blvd.	Orlando	FL	32862	9770				7	
SE	Tampa FL	5201 West Spruce Street	Tampa	FL	33630	9998				8	
NE	Binghamton NY	115 Henry St	Binghamton	NY	13902	9997				2	
PA	Phoenix AZ	4949 East Van Buren Street	Phoenix	AZ	85026	9341				11	
EA	Mansfield OH	200 North Diamond Street	Mansfield	OH	44901	9701				2	
EA	Harrisburg PA	1425 Crooked Hill Rd	Harrisburg	PA	17107	9734				5	
EA	Lehigh Valley PA	17 South Commerce Way	Lehigh Valley	PA	18002	9997				4	
EA	Southeastern (Devon) PA	1000 West Valley Road	Devon	PA	19399	9223				6	
SW	Beaumont TX	5815 Walden Rd	Beaumont	TX	77707	9998				2	
WE	Boise ID	2201 South Cole Rd	Boise	ID	83708	9997				3	
CM	Frederick MD	1550 Tilco Drive	Frederick	MD	21704	9996				2	
EA	Erie PA	2108 East 38th Street	Erie	PA	16515	8931				2	
GL	South Bend IN	424 South Michigan Street	South Bend	IN	46624	9741				2	
WE	Fargo ND	657 2nd Avenue North	Fargo	ND	58102	9997				2	
EA	Asheville NC	591 Brevard Rd	Ashville	NC	28810	9998				2	
WE	Quad Cities (Rock Island) (Milan) IL P&DF	7700 68th Street	Milan	IL	61264	9997				2	
EA	Rocky Mount NC	201 South George Street	Rocky Mount	NC	27801	9997				2	
EA	Clarksburg WV	200 Cava Drive	Clarksburg	WV	26301	9936				2	
CM	Charlottesville VA	3590 Grand Forks Blvd.	Charlottesville	VA	22911	9997				2	
WE	Topeka KS P&DF	1410 NW Gage Blvd	Topeka	KS	66618	2835				2	
WE	Saint Cloud MN P&DF	517 10th Avenue South	Waite Park	MN	56387	9731				2	
SE	Daytona Beach FL	500 Bill France Blvd	Daytona Beach	FL	32114	9997				2	
SE	Augusta GA	525 8th Street	Augusta	GA	30901	9997				2	
SW	Amarillo TX	2301 Ross Street	Amarillo	TX	79120	9997				2	
WE	Pocatello ID	1750 Flandro Drive	Pocatello	ID	83202	1970				1	
EA	Delaware (Wilmington/New Caslte) DE	147 Quigley Blvd.	New Castle	DE	19720	4438				3	
EA	New Castle PA	435 South Cascade Street	New Castle	PA	16108	9998				2	
GL	Fort Wayne IN	1501 South Clinton Street	Ft. Wayne	IN	46802	9741				2	
WE	Sioux Falls SD P&DF	4801 North Fourth Avenue	Sioux Falls	SD	57104	9307				2	
SE	Huntsville AL	3408 Wall Triana Highway	Huntsville	AL	35813	9979				2	
GL	Columbia (Mid-Missouri) MO P&DF	11450 South Airport Dr	Columbia	MO	65299	9731				2	
SW	Alexandria LA	1715 Odom Street	Alexandria	LA	71301	9998				2	
EA	Akron OH	675 Wolf Ledges Pkwy	Akron	OH	44309	9998				5	
EA	Lynchburg VA	3300 Odd Fellows Rd	Lynchburg	VA	24056	9704				2	
WE	Kansas City KS	5215 Richland Avenue	Kansas City	KS	66106	9724				3	
WE	Rochester MN	3939 Valleyhigh Road NW	Rochester	MN	55901	2208				2	
SE	Lakeland FL	2800 Lakeland Hills Blvd	Lakeland	FL	33805	9997				2	
SE	Macon GA	451 College Street	Macon	GA	31213	9714				2	
SW	Lubbock TX	1515 Avenue G	Lubbock	TX	79402	9711				2	

AFCS-IJC Deployment Schedule

Area	Site Name	Street Adress	City	State	Zip	Zip+4		Videojet Build Complete Date	Videojet Ship Date	AFCS	Comments
WE	Billings MT	841 South 26th St	Billings	MT	59101	9998				1	
EA	Reading PA	2100 North 13th Street	Reading	PA	19612	9215				2	
EA	Zanesville OH	900 McIntire Avenue	Zanesville	OH	43701	9998				1	
GL	Muncie IN	4300 South Cowan Road	Muncie	IN	47302	9997				1	
SE	Jackson (Meridan) MS	401 East South Street	Jackson	MS	39205	9720				3	
WE	Springfield MO P&DF	500 West Chestnut Expressway	Springfield	MO	65801	9997				3	
GL	Springfield IL	2105 East Cook Street	Springfield	IL	62703	9731				2	
SW	Lafayette LA	1105 Moss Street	Lafayette	LA	70501	9998				3	
EA	Huntington WV	1000 Virginia Avenue West	Huntington	WV	25704	9998				1	
EA	Roanoke VA	419 Rutherford Avenue NE	Roanoke	VA	24022	9997				3	
WE	Wichita KS	7117 West Harry Street	Wichita	KS	67276	9731				3	
WE	Mankato MN P&DF	851 Summit Ave	Mankato	MN	56002	9997				2	
SE	Savannah GA	210 Bourne Blvd	Savannah	GA	31408	9997				3	
SW	Midland TX	10000 Sloan Field Blvd.	Midland	TX	79711	9997				2	
WE	Cheyenne WY	4800 Converse Avenue	Cheyenne	WY	82009	9997				1	
EA	Lima OH	701 East Hanthorne Way	Lima	OH	45801	9997				2	
EA	Evansville IN	7100 Petersburg Road	Evansville	IN	47711	9997				2	
NE	Buffalo NY	1200 Williams St Rm B-16	Buffalo	NY	14240	9721				6	
SE	Gulfport MS	10285 Corporate Drive	Gulfport	MS	39503	9997				1	
WE	Cape Girardeau MO P&DF	475 Kell Farm Drive	Cape Girardeau	MO	63701	4974				2	
PA	Bakersfield CA	3400 Pegasus Dr	Bakersfield	CA	93380	8083				3	Site placed on hold per USPS.
WE	Duluth MN P&DF	2800 West Michigan Street	Duluth	MN	55806	9997				1	
SE	Bristol VA	111 Sixth Street	Bristol	TN	37621	9100				1	
SW	El Paso TX	8401 Boeing Drive	El Paso	TX	79910	9731				2	
EA	Johnstown PA	235 Jari Drive	Johnstown	PA	15904	6940				2	
EA	Toledo OH	435 South Saint Clair Street	Toledo	OH	43601	9731				3	
GL	Lafayette IN	3450 State Road 26 East	Lafayette	IN	47901	9997				1	
GL	Bloomington IL	1511 East Empire Street	Bloomington	IL	61701	9997				2	
SE	Mobile AL	4538 Shipyard Road	Mobile	AL	36619	9539				2	
GL	Peoria IL	95 State Street	Peoria	IL	61601	9731				2	
PA	Marysville CA	5050 Arboga Road	Marysville	CA	95901	9998				2	Site placed on hold per USPS.
WE	Sioux City IA P&DF	2901 Murphy Drive	Sioux City	IA	51111	9997				2	
SE	Jackson TN	200 Martin Luther King Jr Boulevard	Jackson	TN	38301	9998				1	
SW	McAllen TX	620 East Pecan Blvd.	McAllen	TX	78501	9998				2	
EA	Greensburg PA	201 Avenue B	Youngwood	PA	15697	1711				1	
EA	Canton OH	2650 Cleveland Ave NW	Canton	OH	44711	9702				3	
GL	Kokomo IN	2719 South Webster Street	Kokomo	IN	46902	9997				1	
GL	Champaign IL	2001 North Mattis Avenue	Champaign	IL	61821	9998				2	
SE	Panama City FL (Bay City)	1336 Sherman Avenue	Panama City	FL	32401	9998				1	
GL	Rockford IL	5225 Harrison Avenue	Rockford	IL	61125	9998				2	
PA	Redding CA Main Office	2323 Churn Creek Road	Redding	CA	96049	9800				2	
WE	Bend OR	2300 NE 4th Street	Bend	OR	97701	9998				1	
CM	Easton (Eastern Shore) MD	29060 Air Park Drive	Easton	MD	21601	9997				2	
WE	Cedar Rapids IA	615 6th Ave SE	Cedar Rapids	IA	52401	9731				2	
SE	Knoxville TN	1237 East Weisgarber Road	Knoxville	TN	37950	9996				4	
SW	Corpus Christi TX	809 Nueces Bay Blvd	Corpus Christi	TX	78469	0309				3	
EA	Altoona PA	140 Patch Way Rd	Duncansville	PA	16635	9997				2	
NY	San Juan PR	585 FD Roosevelt Avenue	San Juan	PR	00936	9997				3	
GL	Effingham IL	210 North 3rd Street	Effingham	IL	62401	9998				1	

AFCS-IJC Deployment Schedule

Area	Site Name	Street Adress	City	State	Zip	Zip+4		Videojet Build Complete Date	Videojet Ship Date	AFCS	Comments
SE	Tallahassee FL	2800 South Adams Street	Tallahassee	FL	32301	9603				2	
WE	Medford OR	2195 Sage Road	Medford	OR	97501	9998				1	
SW	Fort Smith AR	3318 South 74th Street	Fort Smith	AR	72903	9998				1	
WE	Waterloo IA	300 Sycamore Street	Waterloo	IA	50701	9997				2	
EA	Wheeling WV	2501 Chapline Street	Wheeling	WV	26003	9998				1	
PA	Honolulu HI	3600 Aolele Street	Honolulu	HI	96820	9998				5	
SW	North Houston TX	4600 Aldine-Bender Rd	North Houston	TX	77315	9997				7	
EA	Williamsport PA	2901 West Reach Road	Williamsport	PA	17701	9998				1	
GL	Oshkosh WI P&DF	1025 West 20th Avenue	Oshkosh	WI	54902	9998				2	
SW	Fort Worth TX	4600 Mark IV Parkway	Ft. Worth	TX	76161	9731				8	
SE	Albany GA	1501 South Slappey Boulevard	Albany	GA	31706	9998				1	
WE	Salem OR	1050 25th Street SE	Salem	OR	97301	9998				2	
NE	Manchester NH	955 Goffs Falls Road	Manchester	NH	03103	9997				3	
SW	Houston TX	401 Franklin Avenue	Houston	TX	77201	9731				9	
EA	Wilkes-Barre PA	300 South Main Street	Wilkes Barre	PA	18701	9342				2	
WE	La Crosse WI	425 State Street	LaCrosse	WI	54601	9998				1	
WE	Eugene OR	3148 Gateway Street	Springfield	OR	97477	0100				3	
GL	Traverse City MI	1801Garfield Road North	Traverse City	MI	49686	9997				1	
SE	Hattiesburg MS GMF	220 South 40th Avenue	Hattiesburg	MS	39402	9998				1	
NE	Portsmouth NH	345 Heritage Avenue	Portsmouth	NH	03801	9731				2	
NE	Burlington (Essex Junction) VT	8 New England Dr	Essex Junction	VT	05452	9997				1	
SW	Waco TX	430 West State Highway 6	Waco	TX	76702	9997				2	
EA	Scranton PA	2800 Stafford Avenue	Scranton	PA	18505	9998				2	
GL	Central Wisconsin (Wausau) WI P&DF	400 Creske Avenue	Rothschild	WI	54474	9998				2	
NE	Utica NY	100 Pitcher Street	Utica	NY	13504	9997				2	
SE	Athens (Atlanta) AMF GA	575 Olympic Dr	Athens	GA	30608	9998				2	
WE	Olympia WA	717 76th Avenue SW.	Olympia	WA	98501	9994				1	
GL	Saginaw MI	1233 South Washington Avenue	Saginaw	MI	48605	9741				2	
NE	White River Junction VT	195 Sykes Mountain Drive	White River Junction	VT	05001	9997				2	
SW	Bryan TX	2121 East William J Bryan Pkwy	Bryan	TX	77801	9998				1	
NY	Mid-Hudson (Newburgh) NY	99 Enterprise Drive	Newburgh	NY	12555	9998				3	
GL	Green Bay WI	300 Packerland Dr.	Green Bay	WI	54303	9998				2	
EA	Hickory NC	110 Somerset Drive	Hickory	NC	28601	9378				2	
WE	Anchorage AK	4141 Postmark Drive	Anchorage	AK	99502	9720				1	
PA	Reno NV	2000 Vassar Street	Reno	NV	89510	9998				3	
GL	Kalamazoo MI	3885 South 9th Street	Kalamazoo	MI	49009	9992				3	
NY	Newark NJ	2 Federal Square	Newark	NJ	07102	9997				2	
PA	Fresno CA	1900 E Street	Fresno	CA	93706	8050				3	
NE	Stamford CT	427 West Avenue	Stamford	CT	06910	9998				3	
NY	JFK Air Mail Center NY	Building 250 JFK Airport	Jamaica	NY	11430	9802				4	
WE	Norfolk NE P&DF	1100 South Pine Street	Norfolk	NE	68701	9997				1	
NE	Wareham (Cape Cod) (Buzzards Bay) MA	25 Tobey Road	Wareham	MA	02571	9731				2	
GL	Bloomington IN	4738 W VERNEL PIKE	Bloomington	IN	47404	9997				1	
EA	Kinston NC	208 East Caswell Street	Kinston	NC	28502	9998				1	
WE	East Bay (Provo) UT	936 South 250 East	Provo	UT	84605	9997				1	
EA	Columbia SC	2001 Dixiana Road	West Columbia	SC	29172	3007				3	
GL	Flint MI	250 East Boulevard Drive	Flint	MI	48502	9741				2	
NY	Teterboro (Northern New Jersey Metro)	200 Industrial Ave	Teterboro	NJ	07699	9998				6	
SE	Chattanooga TN	6050 Shallowford Rd	Chattanooga	TN	37421	9993				3	

AFCS-IJC Deployment Schedule

Area	Site Name	Street Adress	City	State	Zip	Zip+4		Videojet Build Complete Date	Videojet Ship Date	AFCS	Comments
NE	Syracuse NY	5640 East Taft Road	Syracuse	NY	13220	9751				3	
GL	Terre Haute IN	150 West Margaret Drive	Terre Haute	IN	47802	9997				1	
NE	Eastern Maine (Hampden) (Bangor) ME	16 Penobscot Meadow Drive	Hampden	ME	04444	7097				2	
EA	Bowling Green KY	5300 Scottsville Rd	Bowling Green	KY	42104	9731				2	
EA	Florence SC	1901 West Evans St	Florence	SC	29501	9998				2	
GL	Lansing MI	4800 Collins Road	Lansing	MI	48924	9731				4	
NY	Trenton NJ	680 US Highway 130	Trenton	NJ	08650	9997				1	
WE	Colorado Springs CO	3655 East Fountain Blvd	Colorado Springs	CO	80910	9731				3	
EA	Lancaster PA	1400 Harrisburg Pike	Lancaster	PA	17604	9992				4	
SW	Fayetteville (Northwest, AR) AR	2300 City Lake Road	Fayetteville	AR	72701	9997				2	
WE	Grand Island NE P&DF	3835 Old Potash Hwy.	Grand Island	NE	68803	9997				1	
NY	Staten Island NY	550 Manor Road	Staten Island	NY	10314	9770				1	
GL	Gary IN	1499 Martin Luther King Dr	Gary	IN	46401	9731				3	
NE	Northwest Boston (Waltham) (Boston P&DF) MA	200 Smith Street	Waltham	MA	02454	0031				3	
GL	Kingsford (Iron Mountain) MI P&DF	700 West Breitung Avenue	Kingsford	MI	49802	9997				1	
EA	Lexington KY	1088 Nandino Boulevard	Lexington	KY	40511	9791				3	
EA	Charleston SC	7075 Cross County Rd	North Charleston	SC	29423	9731				2	
GL	Grand Rapids MI	225 Michigan Street N.W.	Grand Rapids	MI	49599	5400				5	
NY	Westchester (Mount Vernon/White Plains) NY	1000 Westchester Avenue	White Plains	NY	10610	9997				6	
WE	Bismarck ND	2220 East Bismarck Expressway	Bismarck	ND	58504	9750				1	
PA	Mojave CA	2053 Belshaw Street	Mojave	CA	93501	9998				1	Site placed on hold per USPS.
EA	Greenville SC	600 West Washington St	Greenville	SC	29602	9997				4	
SW	Abilene TX	1010 East I-20	Abilene	TX	79601	9997				2	
SW	Little Rock AR	4700 East McCain Blvd	Little Rock	AR	72231	9731				4	
WE	Lincoln NE P&DF	700 R Street	Lincoln	NE	68501	9998				2	
NE	Watertown NY	232 Commerce Park Drive	Watertown	NY	13601	9998				1	
PA	Santa Barbara (Goleta) CA	400 Storke Road	Goleta	CA	93199	9764				3	
NE	Brockton MA	225 Liberty St	Brockton	MA	02301	5571				4	
SW	Baton Rouge LA	8101 Bluebonnet Blvd	Baton Rouge	LA	70821	9997				4	
EA	Louisville KY	1420 Gardiner Lane	Louisville	KY	40231	9998				5	
EA	Youngstown OH	99 South Walnut Street	Youngstown	OH	44501	9993				2	
GL	Detroit MI	1401 West Fort Street	Detroit	MI	48233	9311				9	
EA	Charlotte NC	2901 South I-85 Service Road	Charlotte	NC	28228	9801				6	
SE	Gainesville FL	4600 SW 34th Street	Gainesville	FL	32608	9997				3	
PA	Oxnard CA	2901 Camino del Sol	Oxnard	CA	93030	9310				3	
PA	San Bernardino CA	1900 West Redlands Blvd	San Bernadino	CA	92423	9001				8	
SW	East Texas (Tyler) TX	12621 FM Road 3311	Tyler	TX	75708	9901				3	
WE	Tacoma WA	4001 South Pine Street	Tacoma	WA	98413	9731				4	
SE	Johnson City TN	530 East Main Street	Johnson City	TN	37601	7601				1	
WE	Salt Lake City UT	1760 West 2100 South	Salt Lake City	UT	84199	9740				5	
NE	Springfield MA	190 Fiberloid Street	Springfield	MA	01152	9735				4	
SW	Shreveport LA	2400 Texas Avenue	Shreveport	LA	71102	9331				4	
GL	Indianapolis IN	125 West South Street	Indianapolis	IN	46206	9741				7	
EA	Charleston WV	1000 Centre Way	Charleston	WV	25350	9701				3	
WE	Kansas City MO	1700 Cleveland Avenue	Kansas City	MO	64121	9998				7	
WE	Omaha NE	1124 Pacific Street	Omaha	NE	68108	9993				4	
EA	Raleigh NC	1 Floretta Place	Raleigh	NC	27676	9731				5	
SE	Mid-Florida (Lake Mary) FL	800 Reinhart Road	Lake Mary	FL	32799	9997				4	
SE	Pensacola FL	1400 West Jordan Street	Pensacola	FL	32501	9701				3	

AFCS-IJC Deployment Schedule

Area	Site Name	Street Adress	City	State	Zip	Zip+4		Videojet Build Complete Date	Videojet Ship Date	AFCS	Comments
NY	Manhattan NY (Morgan)	341 Ninth Avenue	New York	NY	10199	9998				13	
PA	Long Beach CA	2300 Redondo Avenue	Long Beach	CA	90809	9998				7	
SW	Tulsa OK	2132 South 91st E Avenue	Tulsa	OK	74141	9731				5	
CM	Norfolk VA	600 Church Street	Norfolk	VA	23501	9990				5	
WE	Spokane WA	2928 South Spotted Road	Spokane	WA	99224	9731				4	
PA	Las Vegas NV	1001 East Sunset Road.	Las Vegas	NV	89199	5200				5	
NE	Worcester (Central Mass) (Shrewsbury) MA	192 Main Street	Shrewsbury	MA	01546	0001				5	
SW	New Orleans LA	701 Loyola Avenue	New Orleans	LA	70113	9731				6	
SE	Nashville TN	525 Royal Parkway	Nashville	TN	37230	9998				7	
EA	Dayton OH	1111 East 5th Street	Dayton	OH	45401	9997				4	
EA	Fayetteville NC	301 Green St	Fayetteville	NC	28302	9998				4	
WE	Saint Paul MN	180 Kellogg BLVD East	Saint Paul	MN	55164	5007				6	
SE	Fort Lauderdale FL	1900 W. Oakland Park Blvd	Ft. Lauderdale	FL	33310	9998				4	
SE	Manasota FL	850 Tallevast Road	Manasota	FL	34260	9460				4	
PA	Industry (Alhambra) CA	15421 Gale Avenue	City of Industry	CA	91715	9998				8	
SW	Oklahoma City OK	320 SW 5th Street	Oklahoma City	OK	73125	9731				6	
CM	Richmond VA	1801 Brook Road	Richmond	VA	23232	9730				6	
WE	Pasco WA	3500 West Court Street	Paso	WA	99301	9998				1	
NY	Dominic V Daniels (Northern Jersey) (Kearny) NJ	850 Newark Turnpike	Kearny	NJ	07099	9993				8	
WE	Des Moines IA	1165 2nd Avenue	Des Moines	IA	50318	9731				4	
NE	Boston MA	25 Dorchester Ave Rm# B48	Boston	MA	02205	9731				7	
SE	Memphis TN	555 South Third Street	Memphis	TN	38101	9311				4	
CM	Southern Maryland (Capitol Heights) MD	9201 Edgeworth Drive	Capitol Heights	MD	20790	9998				5	
EA	Pittsburgh PA	1001 California Avenue	Pittsburgh	PA	15290	9710				8	
NE	Albany NY	30 Old Karner Rd.	Albany	NY	12288	9997				4	
WE	Minneapolis MN	100 South First Street	Minneapolis	MN	55401	9731				8	
SE	Saint Petersburg FL	3135 1st Avenue North	Saint Petersburg	FL	33730	9998				4	
SE	South Florida (Pembroke Pines) FL	16000 Pines Blvd	Pembroke Pines	FL	33082	9997				4	
PA	Santa Clarita CA (Van Nuys)	28201 Franklin Parkway	Santa Clarita	CA	91383	9997				10	
SW	Austin TX	8225 Cross Park Dr	Austin	TX	78710	9731				6	
CM	Dulles VA	44715 Prentice Drive	Dulles	VA	20101	9341				4	
WE	Everett WA	8120 Hardeson Rd	Everett	WA	98203	9993				4	
EA	South Jersey (Bellmawr) NJ	421 Benigno Blvd	Bellmawr	NL	08031	9997				7	
NE	Portland ME	125 Forest Avenue	Portland	ME	04101	9716				4	
NE	Middlesex-Essex (North Reading) MA	76 Main Street	North Reading	MA	01889	7065				5	
GL	Fox Valley (Aurora) IL	3900 Gabrielle Lane	Aurora	IL	60599	9341				4	
SE	Montgomery AL	6701 Winton Blount Blvd	Montgomery	AL	36119	9997				4	
PA	Tucson AZ	1501 South Cherrybell Street	Tucson	AZ	85726	9701				4	
EA	Cleveland OH	2400 Orange Ave. Rm#67	Cleveland	OH	44101	9997				8	
NE	Rochester NY	1335 Jefferson Road.	Rochester	NY	14692	9721				6	
NE	Providence RI	24 Corliss Street	Providence	RI	02904	9731				6	
SE	Miami FL P&DC	(2200 NW 72nd Avenue) 2200 Miliam Diary Road	Miami	FL	33152	9703				6	
SE	Fort Myers FL	14080 Jetport Loop	Ft. Myers	FL	33913	9997				5	
PA	San Jose CA	1750 Lundy Avenue	San Jose	CA	95101	8050				7	
SW	San Antonio TX	10410 Perrin Beitel Road	San Antonio	TX	78284	9141				7	
CM	Suburban Maryland (Gaithersburg) MD	16501 Shady Grove Road	Gaithersburg	MD	20898	9997				8	
WE	Seattle WA	10700 27th Avenue South	Seattle	WA	98168	1899				8	
NY	Kilmer (Edison) NJ	21 Kilmer Road	Edison	NJ	08899	9998				7	
NY	West Jersey (Whippany) NJ	54 South Jefferson Road	Whippany	NJ	07999	9998				2	

AFCS-IJC Deployment Schedule

Area	Site Name	Street Adress	City	State	Zip	Zip+4		Videojet Build Complete Date	Videojet Ship Date	AFCS	Comments
PA	Stockton CA	3131 Arch Airport Road	Stockton	CA	95213	9713				4	
GL	South Suburban (Bedford Park) IL	6801 West 73rd Street	Bedford Park	IL	60499	9731				5	
SE	Birmingham AL	351 24th Street N.	Birmingham	AL	35203	9979				5	
SW	Albuquerque NM	1135 Broadway Blvd, NE	Albuquerque	NM	87101	5700				4	
EA	Columbus OH	2323 Citygate Dr.	Columbus	OH	43218	9998				8	
EA	Philadelphia PA	2970 Market Street	Philadelphia	PA	19104	9731				10	
NE	Hartford CT	141 Weston St	Hartford	CT	06101	9751				6	
PA	Eureka CA	337 West Clark Street	Eureka	CA	95501	9998				1	
WE	Denver CO	7500 East 53rd Place	Denver	CO	80266	9997				12	
PA	Oakland CA	1675 7th Street	Oakland	CA	94615	9998				10	
SW	North Texas (Coppell) TX	951 West Bethel Road	Coppell	TX	75099	8600				7	
WE	Portland OR	715 NW Hoyt Street	Portland	OR	97208	4009				8	
NY	Brooklyn NY	1050 Forbell St	Brooklyn	NY	11256	9731				5	
NY	Mid-Island (Melville) NY	160 Duryea Rd	Melville	NY	11747	8000				7	
PA	North Bay (Petaluma) CA	1150 North McDowell Blvd	Petaluma	CA	94999	9997				4	
GL	Carol Stream IL	500 E. Fullerton Ave	Carol Stream	IL	60199	9731				6	
WE	Eau Claire WI P&DF	3510 Hogardth Street	Eau Claire	WI	54703	0487				1	
EA	Cincinnati OH	1591 Dalton Avenue	Cincinnati	OH	45234	9998				8	
PA	Sacramento CA	3775 Industrial Blvd	West Sacramento	CA	95799	9930				8	
NE	Southern Connecticut (New Haven) (Wallingford)	24 Research Parkway	Wallingford	CT	06492	9997				6	
PA	Santa Ana CA	3101 West Sunflower Avenue	Santa Ana	CA	97299	9450				9	
SE	West Palm Beach FL	3200 Summit Blvd	West Palm Beach	FL	33406	9731				8	
PA	San Francisco CA	1300 Evans Avenue	San Francisco	CA	94188	9998				11	
SW	Dallas TX	401 DFW Turnpike	Dallas	TX	75260	9341				8	
CM	Baltimore MD	900 E. Fayette St.	Baltimore	MD	21233	9998				10	
NY	Monmouth (Eatontown) NJ	307 Industrial Way West	Eatontown	NJ	07799	9998				4	
NY	Flushing (Queens) NY	142-02 20th Avenue	Flushing	NY	11351	9998				5	
GL	Chicago (C) (Cardiss Collins), IL	433 West Harrison Street	Chicago	IL	60607	9990				9	
GL	Madison WI P&DC	3902 Milwaukee Street	Madison	WI	53714	9998				4	
GL	Royal Oak MI	2351 Bellingham Road	Troy	MI	48083	9120				10	
EA	Greensboro NC	1120 Pleasant Ridge Road	Greensboro	NC	27498	9701				6	
NE	Waterbury CT	135 Grand Street	Waterbury	CT	06701	9997				1	
SE	Atlanta GA	3900 Crown Rd. SW Room# A109	Atlanta	GA	30304	9311				8	
PA	Los Angeles CA P&DC	7001 Souh Central Avenue	Los Angeles	CA	90052	9012				14	
SE	Jacksonville FL	1100 Kings Road.	Jacksonville	FL	32203	9701				6	
NY	Western Nassau (Garden City) NY	830 Stewart Avenue	Garden City	NY	11599	9998				4	
PA	Pasadena CA	600 Lincoln Avenue	Pasadena	CA	91109	9997				4	
GL	Palatine IL	1300 East Northwest Highway	Palatine	IL	60095	9997				9	
GL	Milwaukee WI	345 West Saint Paul Avenue	Milwaukee	WI	53201	5042				8	
NE	Bridgeport CT	120 Middle Street	Bridgeport	CT	06602	9997				1	
SE	North Metro (Duluth) GA	1605 Boggs Road	Duluth	GA	30026	9731				10	
										1076	

Response of Postal Service Witness Marc McCrery
To Interrogatories Posed by Douglas F. Carlson

DFC/USPS-T29-3. Please refer to your testimony at page 4, lines 13–15. Please explain how the OCR upgrade will operate and why it will focus on five-digit ZIP Codes. If a document is available summarizing and describing this upgrade, please provide it.

RESPONSE:

The AFCS OCR upgrade will allow the AFCS to identify 5-digit destination ZIP Codes and perform primary OCR tasks (address block location, character isolation & recognition, and interfacing with our national ZIP Code directory). In addition the AFCS equipment will also be networked into a second processor, known as the Remote Computer Reader (RCR), which uses different algorithms to perform the OCR tasks. The results provided by the AFCS OCR and the RCR go through an arbitration to determine which result should be used. The RCR is designed to do a better job at interpreting handwritten addresses and degraded print. The AFCS will continue to separate out mail carrying Facing Identification Marks. However, instead of splitting the remainder of the successfully processed letters by mail type (machine imprinted vs. handwritten), the new split will be by geography (mail for local destinations vs. mail for destinations outside of the local service area) which is a capability provided through the 5-digit ZIP Code identification. This upgrade, in conjunction with sort plan revisions, is expected to permit fewer subsequent handlings. See attached.

2.0 System Overview

The System Overview section of this guide provides United States Postal Service® (USPS®) managers and supervisors with general information about the Advanced Facer Canceller System-Optical Character Reader (AFCS-OCR), detailed information about its major components, and overall system operation.

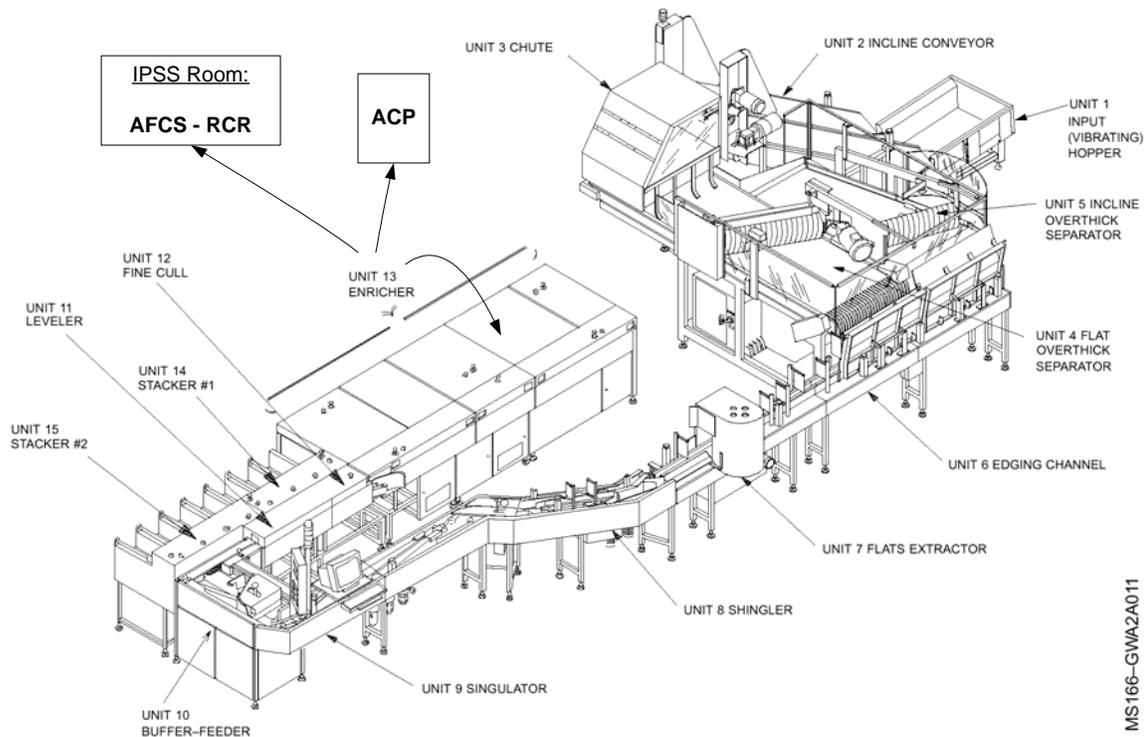
*The guide provides general information about the AFCS-OCR, but is **NOT** intended as a replacement for formal training or other standardized operator instruction.* AFCS-OCR Mail Flow Guide users include In-Plant Support personnel, mail-processing managers, and supervisors.

2.1 AFCS-OCR System Description

The AFCS-OCR modifies the current AFCS-ISS with the installation of two additional recognition systems: the Advanced Co-Processor (ACP) and the Remote Computer Reader (RCR). The ACP is a new hardware unit added to the AFCS system, and the RCR is an installation upgrade of current RCR technology. The ACP and RCR receive AFCS images, resolve 5-digit ZIP code destinations, and instruct the AFCS to sort mail-pieces to the stackers according to local and outgoing ZIP code destinations, as determined by the facility. All other functions of the AFCS-ISS remain unchanged in the new AFCS-OCR system.

The AFCS-OCR operation may be broken down into three primary suboperations: (1) culling, facing, and cancelling, (2) OCR processing, and (3) sorting. The system and basic components are shown in Figure 2-1. The culling, facing, and cancelling operation uses units 1 to 12, as shown in Figure 2-1, and is designed to rough cull the mail volume, extract incompatible mail-pieces, face mail, identify indicia, and cancel postage. OCR processing is performed within unit 13, where the system will print and verify ID tags, lift face images, resolve and finalize ZIP code destination, and transfer images to the IPSS. The sorting operation will take processing results from the previous operations and output the mail-pieces to units 14 and 15.

Figure 2-1: AFCS-OCR System Diagram



MS166-GWA2A011

2.1.1 Culling, Facing, and Cancelling Operation

The following description of the operational mail flow refers to the system components shown in Figure 2-1.

The AFCS-OCR mail flow begins with mail induction into the **Input Hopper** (Unit 1) after processing by the Dual-Pass Rough Cull equipment. The Input Hopper vibrates to separate clustered mail-pieces and to provide a steady flow of mail onto the **Incline Conveyor** (Unit 2). Sensors on the end of the Incline Conveyor belt control the speed of the belt and ensure a regulated flow into the **Chute** (Unit 3).

The Chute incorporates deflectors at the end of the Incline Conveyor that distribute mail evenly across the **Flat Overthick Separator** belt (Unit 4). The Flat Overthick Separator is designed to reject any mail more than 0.25 inches thick and to help ensure that only automation-compatible mail-pieces continue through the equipment. Mail rejected by the Flat Overthick Separator is dropped onto the **Incline Overthick Separator** (Unit 5). This Separator unit provides a second opportunity for incorrectly rejected mail to be accepted as automation compatible and enter further processing in the AFCS-OCR. In addition, the Incline Overthick Separator is configured to reject any mail more than 0.25 inches thick.

Mail-pieces accepted by the Overthick Separators flow into the **Edging Channel** (Unit 6). The Edging Channel passes over an open grille area, called the waterfall, which allows loose, nonmail items to fall into a collection output. Mail-pieces entering the Edging Channel are aligned on their long edge by a series of rollers and barriers. Mail is moved from the Edging Channel into the **Flats Extractor** (Unit 7). Angled rollers in the Extractor reject mail that is more than 8.25 inches long. Rejected mail from this unit is redirected into a chute that extracts mail to either the right or left side of the machine, depending on the specific facility installation.

The **Shingler** (Unit 8) continues the process by moving the mail into an overlapping mail stream using light barriers, proximity switches, and control motors. The mail stream from the Shingler flows into the **Singulator** (Unit 9).

The Singulator breaks apart the overlapping mail flow into a regulated stream of mail, separated by a consistent gap distance between each mail-piece. The separated mail stream flows into the **Buffer Feeder** (Unit 10).

The Buffer Feeder accepts and holds mail from the Singulator until the Face Cancelling operation is ready to begin processing. The Buffer Feeder is the primary control point for the Culling operation. All culler motor power and control signals of Units 1–10, are controlled by signals generated from hardware in the Buffer Feeder.

Mail is moved from the Buffer Feeder into the **Leveler** (Unit 11), where the mail-pieces are transferred by a series of belts to **Fine Cull** (Unit 12). Fine Cull rejects all mail-pieces that do not meet AFCS-compatible specifications, as defined in the previous section in Table 1-1. Sensors within the unit measure and test the mail-piece height, length, skew, stiffness, and gap between mail-pieces. Mail that is rejected by Fine Cull is extracted by the system through a diversion chute. Accepted mail is moved into the **Enricher** (Unit 13) where mail is checked for indicia, postage is cancelled, and ID tags are printed and verified.

2.1.2 OCR Processing Operation

The **Enricher** (Unit 13) includes most of the electronics of the AFCS-OCR and serves as the communication interface with the new image recognition components, the ACP and RCR. All of the new functionality of the AFCS-OCR is used in the Enricher unit. Images are processed by the ACP and RCR to resolve a 5-digit ZIP code result and determine if the destination is local or outgoing. Letter-mail destination type is used for sorting purposes. After a sorting decision has been made, the ACP and RCR will attempt to finalize the letter-mail address.

The following details more about the new components of the system that perform the OCR processing operation.

AFCS Advanced Co-Processor (ACP)

The ACP is a modular rack of computer equipment that is positioned on the workroom floor at the AFCS machine. The ACP provides the additional computational capacity to analyze and resolve address information to potentially determine local or outgoing ZIP code destinations. Destination information is used to instruct the AFCS to sort mail volume to the stackers according to destination category. Figure 2-2 shows the ACP module, which connects the AFCS system to the AFCS-RCR and the IPSS.

Figure 2–2: Advanced Co-Processor (ACP) Module



AFCS Remote Computer Reader (RCR)

The current version of the RCR is primarily being used in automation equipment to process letter-mail images and allow online functionality for sending images to the REC sites. The current RCR technology was implemented during the Recognition Improvement Program – II (RIP-II), and was incorporated into the Multiline Optical Character Reader (MLOCR) and Delivery Input/Output Subsystem (DIOSS) automation equipment. The AFCS-RCR is an upgrade from current RCR technology and provides the AFCS equipment with the same recognition and online functionality as the MLOCR and DIOSS machines.

Additionally, as explained in Section 1, Introduction, the new AFCS-RCR will upgrade all mail-processing sites and allow standardization of RCR technology in both enhanced and local RCR sites. Figure 2-3 shows the AFCS-RCR rack that will be installed in the IPSS room.

Figure 2-3: AFCS – Remote Computer Reader (AFCS-RCR) Module



2.1.3 Sorting Operation

After the mail is processed by the ACP and RCR, the final operation of letter-mail processing on the AFCS-OCR is sorting the mail. Sorted mail is output according to a predefined sort program to the **Stackers** (Unit 14 and 15), which are comprised of seven outputs. These outputs separate mail according to four categories, shown in Table 2-1.

Table 2–1: AFCS-OCR Stacker Output Categories

Stacker	Category	Destination Type	Description
1 2	A	FIM	Mail with Facing Identification Mark (FIM).
3 4	B	Local	5-digit ZIP codes, determined by the facility as local destinations. Timeout mail may be output to these stackers if specified by the SPS sort program.
5 6	C	Outgoing	5-digit ZIP codes, determined by the facility as outgoing destinations. Timeout mail may be output to these stackers if specified by the SPS sort program.
7	---	Indicia/Mechanical Reject	Indicia/Mechanical reject mail. Mail that has not met specifications or otherwise rejected by the AFCS.

The local, outgoing, and FIM categories are each assigned two stacker outputs to allow sorting for both “lead” and “trail” orientations of the mail. The terms “lead” and “trail” describe whether the postage is on the front or back of the letter respectively, in relation to the direction of travel through the AFCS.

Destination stackers for sorted mail must be defined by the facility, in addition to specifying which ZIP codes should be considered as local or outgoing. Mail that is not successfully resolved for a 5-digit ZIP code is sent to a default output specified by the sort program created with the Sort Program System (SPS), and is referred to as “timeout” mail. (For more information about timeout mail, see section 4.3.1, Sort Program Function Review.) The default stacker output is determined by the facility and will route timeout mail to either the local or outgoing designated outputs, not a combination of both. Timeout mail may also not be sorted to the FIM or mechanical reject outputs.

The preferred recommendation for facilities is to always assign timeout mail to the outgoing output. This will improve the chance for efficiently processing all outgoing mail with higher priority, in addition to improving the chance for the facility to meet the strict dispatch requirements. However, many factors influence what sorting strategy would best fit a particular facility. Scenario examples and explanations of deciding factors that impact sorting are included in Section 4, Sort Programs.

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Response of Postal Service Witness Marc McCrery
To Interrogatories Posed by Douglas F. Carlson

DFC/USPS-T29-4. Please refer to your testimony at page 4, lines 16–17. Please explain how the Video Facing Modification program operates. If a document is available summarizing and describing this program, please provide it.

RESPONSE:

The AFCS Video Facing Modification reduces the requirement for manually facing and canceling bypass mail, which is mail that has been rejected while being processed in the normal face and cancel mode of the AFCS. Not detecting any phosphorescent or fluorescent ink in the indicia area is the usual cause for bypass mail. The AFCS Video Modification kit automates the manual facing by providing a face-only mode that allows the AFCS to face mail which does not have phosphorescent or fluorescent ink in the stamp, meter mark, or indicia imprint. At least one AFCS at each major processing facility has been equipped with the Video Facing Modification. Bypass mail from all of the AFCS machines at a facility is run across the enhanced AFCS in the video-facing mode. When the facing is complete, this bypass mail is then run through the AFCS in cancel-only mode. This significantly reduces the need to manually face and cancel bypass mail. See attached.

AFCS -VIDEO FACING MODIFICATION

The AFCS - Video Facer (AFCS-VF) modification enhances the AFCS/ISS operation by providing a FACE ONLY mode for facing reject/bypass mail based on address data taken from the scanned mailpiece image. Stamp and meter indicia are not required for this facing operation, but are monitored and may be used for facing decision. FIM A/C mail are faced based on the FIM code. Video facing is performed by the new AFCS coprocessor (ACP). Video Facing mode reduces the current labor intensive operation of manually facing the reject/bypass mail. Current facing acceptance rate is approximately 90 percent which is above the project goal of 80 percent. Sortation error rate is less than 8 percent.

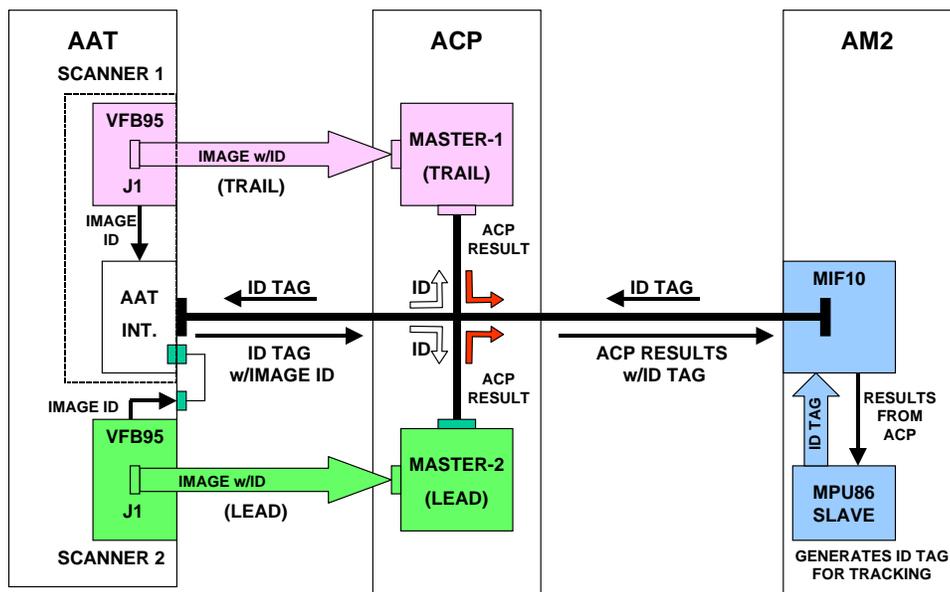


Figure 1 - Video Facing Modification

When the AFCS is placed in the Video Facing mode of operation the MPU86 Slave generates ID Tag information for each mailpiece processed. The ID Tag is sent to the AAT Interface card via the MIF10 card. This ID Tag is matched up with the Image ID from either the Trail or Lead Scanner Image ID. The ID Tag with the Image ID is then sent to the respective Master Processors in the AFCS Coprocessor (ACP) cabinet. The image from the VFB95 card associated with the Trail or Lead scanner along with the Image ID is sent to either the Master-1 for trail scanner or Master-2 for the Lead scanner. This is then matched up with the ID Tag and Image ID for results. After matching ID tag with Image ID the images are processed by the ACP computers. The results from the two ACP masters are arbitrated and the final result with ID Tag is sent back to the MPU86 Slave via the MIF10 card. This result is then used to generate the stacker information needed to face the mailpiece to the correct facing stacker.

Response of Postal Service Witness Marc McCrery
To Interrogatories Posed by Douglas F. Carlson

DFC/USPS-T29-5. Please refer to your testimony at page 4, lines 17–19. Will the remaining 728 AFCS machines not be upgraded with the Video Facing Modification?

RESPONSE:

Confirmed. The volume of bypass mail re-run on the AFCS in the video facing mode can be handled by the existing Video Facing Modification deployments.

Response of Postal Service Witness Marc McCrery
To Interrogatories Posed by Douglas F. Carlson

DFC/USPS-T29-6. Please refer to your testimony at page 4, lines 26–27. Do all MLOCR's have 60 stackers?

RESPONSE: No. The MLOCRs have either 44 or 60 stackers.

Response of Postal Service Witness Marc McCrery
To Interrogatories Posed by Douglas F. Carlson

DFC/USPS-T29-7. Please provide the percentage of mail in the RBCS — i.e., mail for which an image has been lifted — that is sent to an REC for resolution of at least part of the address.

RESPONSE:

The percentage of the pieces fed into the AFCS ISS, MLOCR ISS and DIOSS which are not finalized and are subsequently sent to the REC for resolution is 24.4 percent for FY04.

Response of Postal Service Witness Marc McCrery
To Interrogatories Posed by Douglas F. Carlson

DFC/USPS-T29-8. Please provide the percentage of mail whose address the MLOCR and DIOSS machines resolve to the depth of sort required without sending an image to the RBCS.

RESPONSE:

Out of the pieces fed to the AFCS ISS, MLOCR ISS and DIOSS, 51.3% percent of the pieces were finalized to the best depth of code without further resolution by RCR or REC keying.

Response of Postal Service Witness Marc McCrery
To Interrogatories Posed by Douglas F. Carlson

DFC/USPS-T29-9. Suppose an MLOCR is able to resolve an address to the depth of sort required, without sending the image to the RBCS; however, text is preprinted on the envelope in the area where the Postnet bar code is sprayed, and this text renders the Postnet bar code illegible. Will the ID Code Sortation system allow this letter to be sorted using information contained in the RBCS ID tag?

RESPONSE:

The letter in the example stated above will be sorted using the ID Code Sortation system (ICS). ICS does not sort on information in the ID Code but uses the ID Code to access information in the database. This information is retrieved from the ICS database and used to sort the letter through the ICS process.

Response of Postal Service Witness Marc McCrery
To Interrogatories Posed by Douglas F. Carlson

DFC/USPS-T29-10. Suppose a DIOSS operating in OCR mode is able to resolve an address to the depth of sort required, without sending the image to the RBCS; however, text is preprinted on the envelope in the area where the Postnet bar code is sprayed, and this text renders the Postnet bar code illegible. Will the ID Code Sortation system allow this letter to be sorted using information contained in the RBCS ID tag?

RESPONSE:

See response to DFC/USPS-T29-9.

Response of Postal Service Witness Marc McCrery
To Interrogatories Posed by Douglas F. Carlson

DFC/USPS-T29-11. Please provide a document that summarizes the Postal Automated Redirection System.

RESPONSE:

See attached. Also, a description of PARS is included in the referenced testimony. See page 8, lines 14-29, and page 9, lines 1-18.

POSTAL AUTOMATED REDIRECTION SYSTEM

John F. Keegan
Manager, Automation Equipment
United States Postal Service

Abstract

The United States is a nation on the move. It is estimated that about 20 percent of the country's population changes addresses each year. That results in over 43 million change-of-address cards and more than 2.4 billion pieces of letter mail that must be forwarded to the new address. The total cost of this activity exceeds \$1.1 billion annually. In an effort to reduce these costs, the Postal Service has purchased the Postal Automated Redirection System (PARS). This system is expected to drastically reduce the handling and processing time associated with redirecting letter mail.

The first phase for the PARS deployment begins in September 2003 and finishes in July 2004. This includes 53 processing plants and automates nearly one-fourth of all forwarded letters. An additional phase is planned for the remaining 229 sites are scheduled for completion by April 2006.

Introduction

The USPS awarded the PARS contract to Siemens Dematic in June 2002. The overall objective of the contract was to provide a system capable of automating the handling of undeliverable-as-addressed (UAA) letter mail. The purchase is the first attempt by the US Postal Service to use an incentive contract to motivate a contractor to drive costs out of an entire operation. The payment to Siemens is based on the performance of the system.

The three main functions of PARS that account for a majority of the operational impact are: change of address forms entry, automated forwarding of mail pieces, and address correction service. There are other parts of the forwarding process that PARS improves but this paper will focus on these three main areas.

PARS is a major overhaul to the existing system that is in need of replacement. The new system uses a combination of software, hardware and digital transmission of images to make enormous improvements in productivity of handling undeliverable as addressed letter mail.

Background

Redirection, also called mail forwarding in some countries, is the process of determining the new delivery address for a customer who has mail that is addressed to a location where they no longer live. Keeping up with changing addresses is a time consuming, labor intensive and costly business. The USPS provides this free service for first class mail to customers for up to 18 months after a patron moves.

Background (continued)

Prior to 1980, the letter carrier had the task of manually writing the new address for customers on the envelope and placed the envelope back in the mail stream.

PARS

Various non mechanized improvements led to the introduction of the mechanized terminal in 1987 (figure 2). These machines apply a yellow label with the patron's new address and sort the piece to a specific separation.

The USPS has worked to apply better technology to reduce the cost of the forwarding process. Faster computers made it easier to maintain large databases of information but only small reductions in costs were achieved. PARS provides the groundwork to automate the entire process and make major reductions in work hours necessary to forward mail.

Present System Data Entry

In the United States, postal customers are required to notify the U.S. Postal Service when they move. Notification is preferred at least 30 days before the move but generally is received on or about the day they move. The change-of address card is filled out with the current and future address. The cards are sent to one of 240 centralized locations where all the information is keyed manually into a computer for use by the forwarding system. The data is uploaded daily to the local directory and weekly to a National Change of Address database. This database maintenance is the backbone of the current forwarding process. The data must be current and accurate to maintain the sanctity of the undeliverable mail.

The Internet provides another means of entering redirection data. Customers can now log on and enter the information about their move. For security purposes, they are required to pay \$1.00 with a credit card. The link to the credit card address provides protection against fraudulent submissions. Less than 2% of the 43 million cards processed in 2002, were entered via the Internet. This statistic helps to confirm the fact that customers are still not comfortable about giving out credit card information over the internet.

PARS Data Entry

PARS streamlines the change-of-address process by using a combination optical character reader technology and remote keying terminals. The first item to change in the process was the card itself. (Figure 1). The change-of-address card was redesigned using colored grid lines that are easily ignored by the OCR software. The cards are received by one of the 86 strategically located scanning sites. The card is scanned and the image is sent electronically to one of 4 centralized remote encoding centers. These are the same centers that process the images of the non-readable letter and flat mail the USPS processes each day. The images are first processed by the OCR to decipher as much information as possible. The piece is then presented to the operator at the remote site for some manual data entry and finally to another operator for verification. Naturally, high accuracy is mandatory and requires the software to differentiate between several members of the same family moving to different locations. This verification step is to make absolutely certain that the information is accurate.

PARS Data Entry (continued)

The OCR is the key for reducing work hours with the PARS data entry system. The old system requires keystrokes for all the information and now the software deciphers most of the information. The internet data entry system is unchanged by PARS.

PARS

Current Forwarding Process

Forwarding, at the present time, is a destination-based service, which means that a mail piece must be processed all the way through the system to the mail carrier who identifies it as a piece that cannot be delivered as addressed. The mail piece then goes to a redirection center where it is separated into letter sized and non-letter sized mail and batched by town. The letter-sized pieces are then processed on mechanized terminals (figure 2) that singulate and feed the pieces one at a time to a redirection clerk who enters an extraction of the address information. The extraction consists of the first four letters of the addressee's last name and the last three numbers of the street address, of the address information. When a match is found in the database, which is local as opposed to national, the mail piece automatically advances to have a redirection label, which includes a POSTNET bar code, applied and is then sorted to one of seven manually swept destination bins. Some of the mail is entered directly into the bar coded mail stream while other mail requires further processing.

In 2002, the USPS had 1377 mechanized terminals processing over 2.4 billion pieces of letter mail that required forwarding service. The overall system throughput is approximately 700 pieces/hour.

PARS Forwarding Process

PARS drastically changes the flow of forwarded mail within the USPS (figure 3). A majority of the forwardable mail that is seen by the sorting equipment in processing centers is identified and held out at the origin location. The system will utilize a nationwide change of address database installed at each processing and distribution center, and remote encoding center. The system software reads endorsement codes, classes and address elements automatically. The remainder of the forwardable mail that is not intercepted by the machines is called carrier identified and is sent to the processing and distribution center. In both cases, the mail receives a yellow label with the new address on the Combined Input Output Subsystem (CIOSS) at the processing center (figure 4).

PARS Forwarding Process (continued)

PARS uses a sophisticated network of computers to identify and intercept images. The rules governing the interception are strict to make sure that the piece is not directed to the wrong location. The OCR presents the first opportunity to detect and handle a mail piece requiring redirection. Precise recognition means no guessing. If the recognition engine is not certain that the mail piece requires redirection, it must reject it. Two important criteria must be met before a piece is identified. First, the unique 11-digit bar code detected is compared to the national database of persons that have moved. Second, the name of the person that has moved must be read off the envelope. When both of these requirements are met, the piece is held out to a specific separation. The mail can then be processed on the CIOSS machine where a yellow label with the new address and bar code representing the delivery point data for the new address is applied on the mail piece. With the current system, it takes over 5 days for a person to receive their forwarded mail; with PARS, the above process can get the mail to the new address as early as the next day.

The CIOSS (figure 4) is created by adding a 25 foot module to an existing

PARS

Delivery Bar Code Sorting machine. The USPS has a fleet of over 6,000 of these machines primarily used to delivery point sequence the mail for carriers. The retrofit requires that the machine run as a CIOSS while maintaining all the present machine functionality. The module is equipped with two high speed labelers, ink jet printer, doubles detector and OCR. The dual labeler is capable of applying a yellow label and printing the new address information at a throughput of over 20,000 pieces per hour. The PARS program would not be possible without this high speed state of the art machine. The USPS plans to have 260 CIOSS machines located at major processing centers nationwide.

If the OCR and data entry operator should fail to recognize a mail piece requiring redirection, all is not lost because the mail carrier knows which customers have moved and is the last line of defense in ensuring the quality of the PARS program. When this occurs, a carrier simply redirects the missed mail piece to the processing center.

The UAA mail that is not intercepted at origin and is identified and confirmed by the carrier is sent to the processing center where a label is applied automatically. By automating both the intercepted and carrier-confirmed mail, the USPS will eliminate all of the 1377 mechanized terminals located at 219 redirection centers. PARS is expected to expand to larger flat and magazine size mail pieces in the next phase

Present Address Correction Service

In an effort to inform mailers that the person they are sending mail to have moved, the USPS provides address correction service. In the past, this has been a profitable way of reducing the volume of forwardable mail.

Presently, the mechanized terminal operator plays a part in providing this service. The operator must also view the return address to determine if the mailer wants to be informed of the address change or wants the mail piece returned or destroyed by looking for the words such as "Address Correction Requested," "Do Not Forward," "Do Not Return," etc. If one of these endorsements is found, the mail piece requires additional manual handlings prior to being entered into the bar coded mail stream. .

Any pieces that require this service are placed on a template and copied manually onto a large post card. The post card is then sent to the mailers where they can record the new address of their customer. The mailers pay 70 cents for each card they receive.

Present Address Correction Service (continued)

Mailers that participate in an address correction database service get other advantages. The mailer places a participant code on the mailing label that uniquely identifies them. Mail with the endorsement is trapped at the redirection center and electronic change-of-address information is sent to the mailer on a daily, weekly or monthly basis on computer tape, cartridge or diskette media. ACS is ideal for address records maintained on computers. It reduces the chance of mailer data entry errors and the only fee paid is for the actual address change. The USPS receives 20 cents for each of the new

PARS

addresses sent to the mailer.

PARS Address Correction Service

The PARS address correction solution totally automates the current process. Instead of the labor intensive job of copying each individual piece, PARS sends the image electronically and prints the card automatically at the National Customer Service Center in Memphis, Tennessee. The system will collect images throughout the day from the 282 processing centers. The database of images and results is sorted by town or vendor, printed, placed in trays and sent to the respective processing center for delivery (figure 5). It is estimated that over 800,000 cards will be automatically printed each day.

This improvement virtually eliminates most of the cost to process the cards. There is no longer a need for a person at each of the 219 centers to manually copy each piece of mail. PARS reduces this cost and also creates an automation piece of mail.

Conclusion

The PARS program will revolutionize the entire mail forwarding process at the US Postal Service. From the entering of information into the data base to intercepting forwardable mail at origin, the benefits of automating this now labor intensive process go beyond just labor savings. The USPS will get the mail to the consumer faster with a higher degree of accuracy.

PARS offers several advantages over today's methods for handling undeliverable as addressed mail:

- a. Under PARS, the customer will submit a new OCR-readable form that is mostly read by software. The data is verified and then uploaded to a central database and sent to every piece of letter automation equipment in the country equipped with a PARS upgrade.
- b. A significant percentage of the undeliverable as addressed mail will be identified, relabeled and redirected by PARS during initial automated processing. All of the handlings, transportation, and time formerly needed to get the mail to the customer's prior letter carrier will no longer be required. Customer satisfaction will improve with higher accuracy rates and faster delivery of forwarded pieces.
- c. PARS reduces the manual workload of copying address service requested forms. The printing of all the images at the National Customer Service Center will allow for significant cost savings. Additional handlings will also be reduced by presorting the cards to the town and printing a bar code on the piece. The card that was handled manually can be processed on an automated bar code sorter.

Conclusion (continued)

The investment the USPS is making for PARS is a major factor in reducing the operating costs and improving customer service. The system will provide the

PARS

USPS with the means to reduce the annual cost by about \$400 million. PARS is an integral part of the Strategic Transformation Plan by helping the USPS manage costs, improve service and maintain low postage rates for the American people.

OFFICIAL MAIL FORWARDING CHANGE OF ADDRESS ORDER

OFFICIAL USE ONLY

Please PRINT items 1 - 10 in blue or black ink. Your signature is required in item 9.

1. Change of Address for: (Read Attached Instructions) 2. Is This Move Temporary? Yes, Fill in ▼
Individual(#5) Entire Family(#5) Business(#6)

3. Start Date: MM DD YY 4. If TEMPORARY move, print date to discontinue forwarding: MM DD YY

5a. Print LAST Name
5b. First Name and MI
6. Print Business Name

Zone/Route ID No.

Date Entered on Form 3982							
M	M	D	D	Y	Y		
Expiration Date							
M	M	D	D	Y	Y		
Clerk/Carrier Endorsement							

PRINT OLD MAILING ADDRESS BELOW: HOUSE/BUILDING NUMBER AND STREET NAME (INCLUDE ST., AVE., CT., ETC.)

7a. OLD Mailing Address

7b. For Puerto Rico Only: If address is in PR, print urbanization name, if appropriate.

7a. OLD APT or Suite

7c. OLD CITY

7d. State

7e. ZIP

PRINT NEW MAILING ADDRESS BELOW: HOUSE/BUILDING NUMBER AND STREET NAME (INCLUDE ST., AVE., CT., ETC.)

8a. NEW Mailing Address

8b. For Puerto Rico Only: If address is in PR, print urbanization name, if appropriate.

8a. NEW APT/Ste or PMB

8c. NEW CITY

8d. State

8e. ZIP

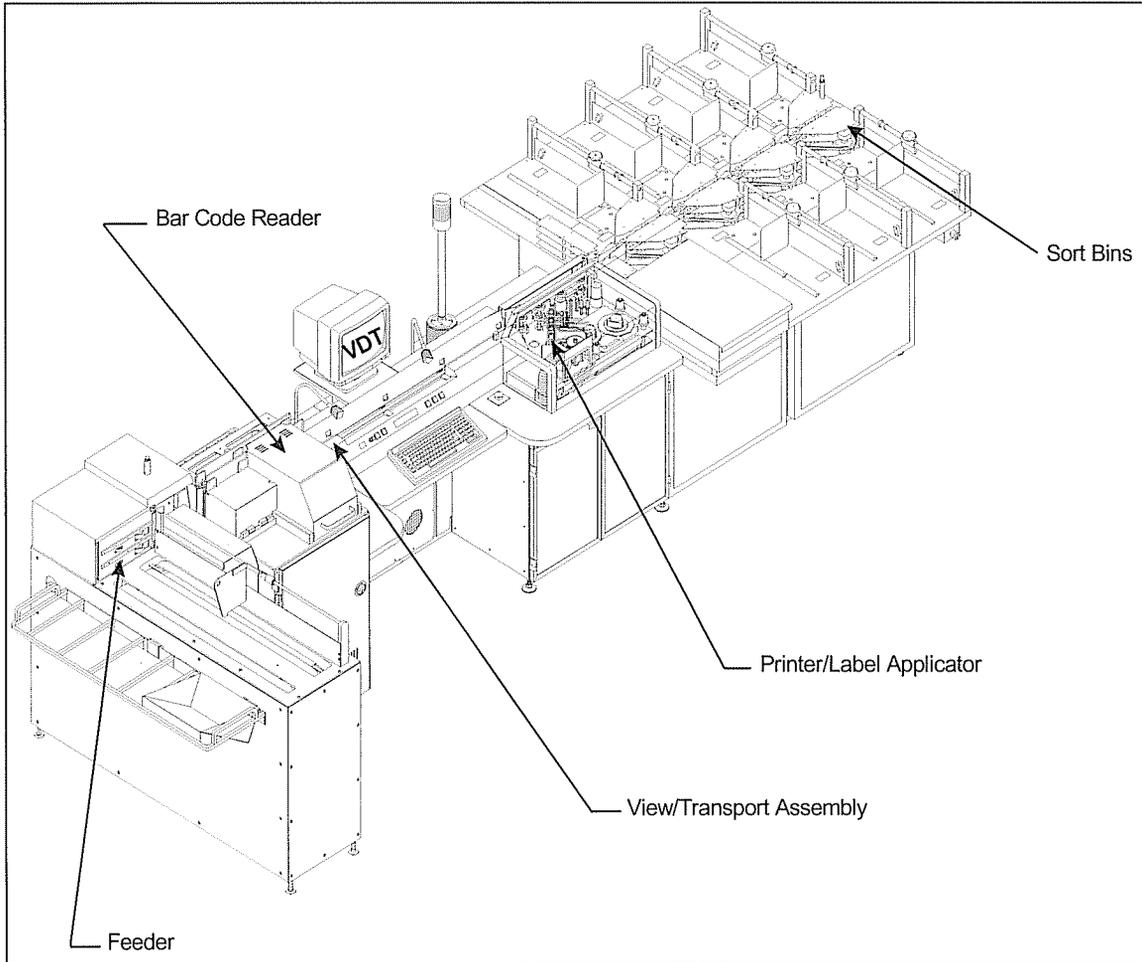
9. Print and Sign Name (see conditions on reverse)

Print:
Sign:

10. Date Signed: MMDDYY

OFFICIAL USE ONLY

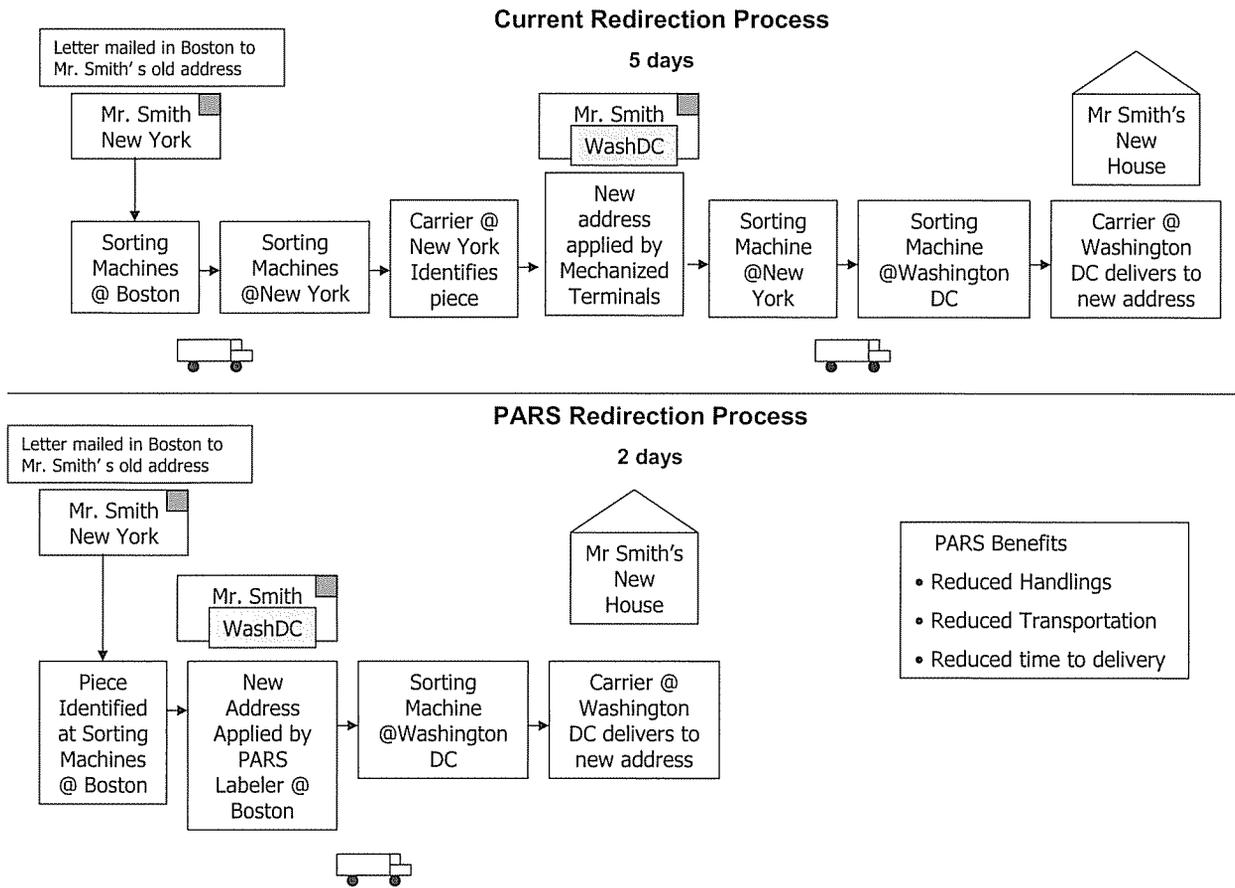
**Change of Address Card
Figure 1**



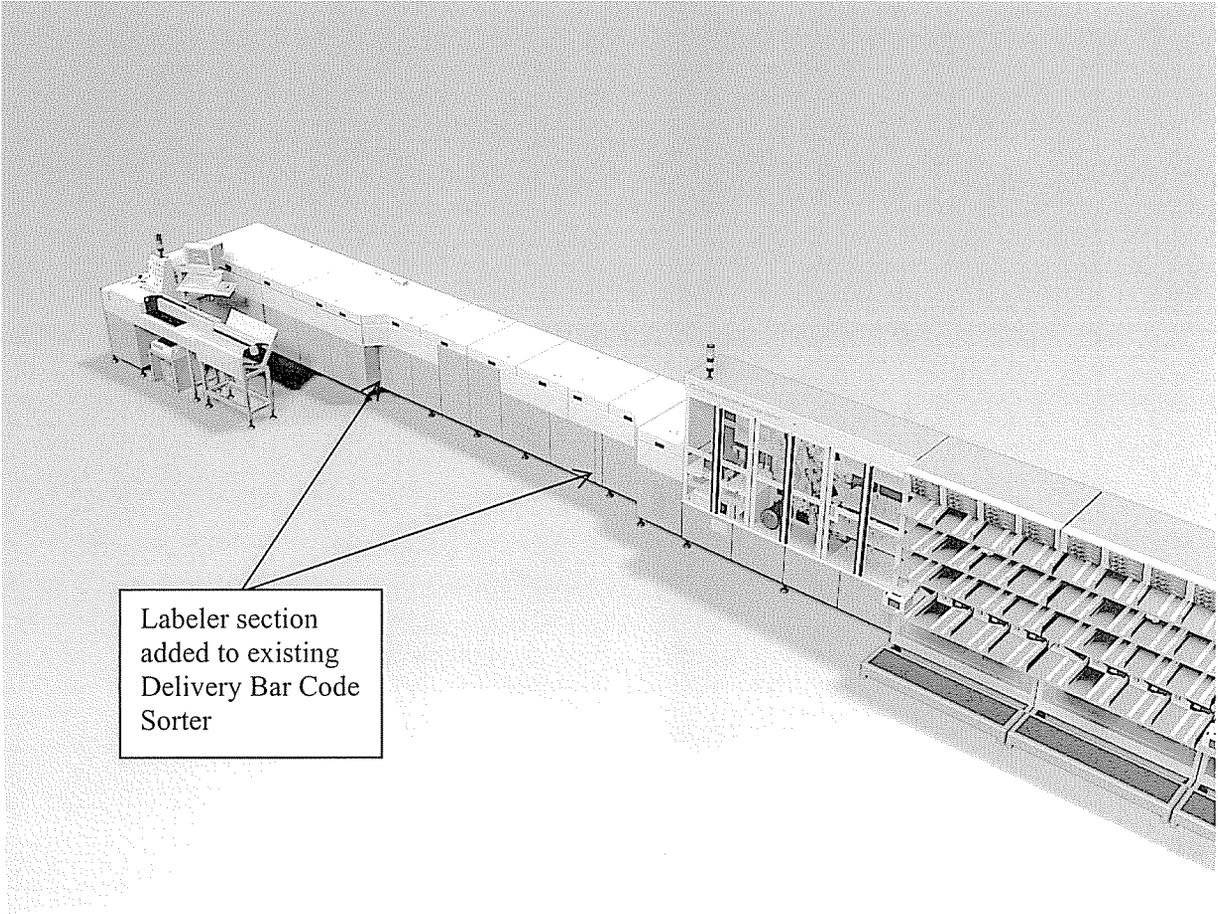
Current Redirection Terminal

Figure 2

PARS



**Redirection Process
Current vs PARS
Comparison
Figure 3**



Labeler section
added to existing
Delivery Bar Code
Sorter

**Combined Input Output
Subsystem
CROSS
Figure 4**

	Form 3547 Fee due 70 cents	<i>First class mail</i> <i>Postage and Fees Paid</i> USPS <i>Permit No. G10</i>
<div style="display: flex; justify-content: space-between; align-items: flex-start;"> <div style="width: 45%;"> <p>ACME Publishing PO Box 15223 Somewhere NY 10013</p> <p style="font-size: small;">ADDRESS SERVICE REQUESTED</p> </div> <div style="width: 45%; text-align: right;">  </div> </div> <div style="border: 1px solid black; padding: 10px; margin: 10px auto; width: 80%;"> <p style="text-align: center;">John Doe 7 Miner Street Apt. 3 Anywhere MA 07890</p> <p style="font-size: x-small; margin-top: 10px;">Mailbox overflowing? Get online statement delivery instead.</p> </div>		

OLD: 7 Miner Street Apt. 3
Anywhere MA 07890

NEW: 10 Main Street
Smalltown CA 90210

TO THE POSTMASTER OF

ACME Publishing
PO Box 15223
Somewhere NY 10013

2002-07-03 11:47 1-0002332 el:1 proc:2002-07-03 eff:2002-05-02
PLANETId:26 Code:300405671



Address Correction Service
Form 3547
Figure 5

CERTIFICATE OF SERVICE

I hereby certify that I have this date served the foregoing document in accordance with Section 12 of the Rules of Practice and Procedure.

Eric P. Koetting

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Washington, D.C. 20260-1137
(202) 268-2992, FAX: -5402
May 9, 2005