Maintenance Management Order

UNITED STATES POSTAL SERVICE™

SUBJECT: Operational and Preventive Maintenance Guidelines for Virtual Postal Address Redirection System (vPARS) Feeder Sites

TO: All PARS Feeder Sites

DATE: October 20, 2023

PUB NO: MMO-076-22
FILE CODE: 2VA, 2VB
FILE ID: mm22077
REV LEVEL: aj

This Maintenance Management Order (MMO) provides Preventive Maintenance Guidelines for the Virtual Postal Automated Redirection System (VPARS). This bulletin **supersedes MMO-099-20 for feeder sites only**. This bulletin applies to Acronym PARS, and Class Codes VA and VB.

Remote Encoding Center (REC) Video Display Terminal (VDT) maintenance is not included in this MMO. These preventive maintenance guidelines are for Feeder sites only.

The workhours indicated in the workload estimate (Attachment 1) are based on a 24-hour operations window and reflect the maximum annual workhours required to maintain each system. Actual workhour requirements and the frequency of tasks are dependent on run time and pieces processed. Therefore, PM workhour requirements will vary day-to-day based on site-specific machine utilization. Management may modify task frequencies to address local conditions. The minimum maintenance skill level required to perform each task is included in the Minimum Skill Level column of each checklist. This does not preclude higher-level employees from performing any of this work.

WARNING

Various products requiring Safety Data Sheets (SDS) may be utilized during the performance of the procedures in this bulletin. Ensure the current SDS for each product used is on file and available to all employees. When reordering such a product, it is suggested that current SDS be requested. Refer to SDS for appropriate personal protective equipment.

WARNING

The use of compressed or blown air is prohibited. An alternative cleaning method such as a HEPA filtered vacuum cleaner, a damp rag, lint-free cloth, or brush must be used in place of compressed or blown air.

WARNING

Steps contained in this bulletin may require the use of Electrical Work Plan (EWP) Personal Protective Equipment (PPE). Refer to the current EWP MMO for appropriate EWP PPE and barricade requirements.

For questions or comments concerning this bulletin contact the MTSC HelpDesk, either online at **MTSC>HELPDESK>Create/Update Tickets** or call (800) 366-4123.

Frederick L. Jackson III
Executive Manager
Maintenance Technical Support Center
Asset Maintenance Planning, Performance, and Support

Attachments   1.   Summary Workload Estimate For PARS VA, VB
2.   Master Checklist 03-PARS-VA, VB-001-M – PARS Preventive Maintenance (PM)
3.   PDC and REC Master Checklist 09-PARS-VA, VB-001-M – PARS Operational Maintenance (OM)
4.   Illustrations for Attachment 2, 3, and List of Feeder Sites

ATTACHMENT 1

SUMMARY WORKLOAD ESTIMATE

FOR PARS_VA, VB

Operation Days	Routine Servicing per Machine (Hrs/yr)	Repair Time per Machine (Hrs/yr)*	Routine Servicing + Repair Time (Hrs/yr)	Non-Productive Time per Machine (Hrs/yr)**	Total Servicing per Machine (Hrs/Yr)	Operational Maintenance + Total Servicing		
						1 Tour Hrs/Yr OpM x 1	2 Tours Hrs/Yr OpM x 2	3 Tours Hrs/Yr OpM x 3
5 Days	80.00	24.00	104.00	10.40	114.40	127.40	140.40	153.40
6 Days	93.87	28.16	122.03	12.20	134.23	149.83	165.43	181.03
7 Days	107.74	32.32	140.06	14.01	154.07	172.27	190.47	208.67

*   Repair maintenance estimates based on 30% of preventive maintenance.

**   Based on 10% of total PM and repair.

THRESHOLDS and PM TIME SUMMARY Hrs PER Year			OPERATIONAL MAINTENANCE		
Daily	97.07		9 MIN. PER DAY PER MACHINE		
Weekly	8.67		One Tour	Two Tours	Three Tours
Monthly	2.00	5 Day	13.00	26.00	39.00
Quarterly	0.00	6 Day	15.60	31.20	46.80
Semi-Annual	0.00	7 Day	18.20	36.40	54.60
Annual	0.00				
Bi-Annual	0.00				

NOTES:
*Repair estimates based on 30% of servicing.
**Based on 10% of total servicing and repair.
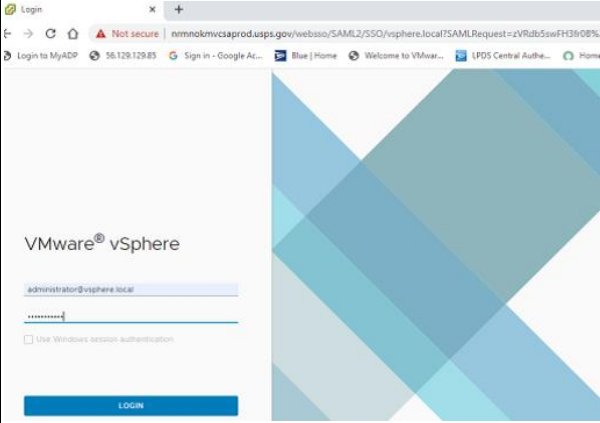
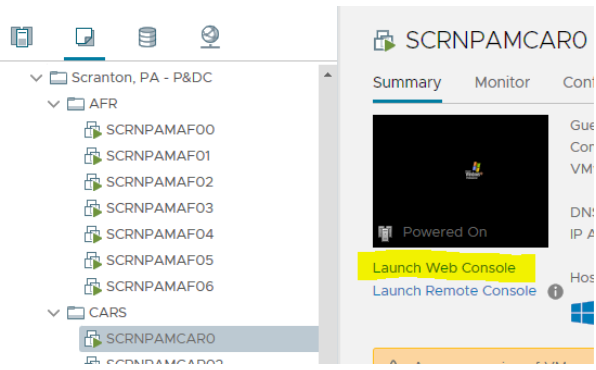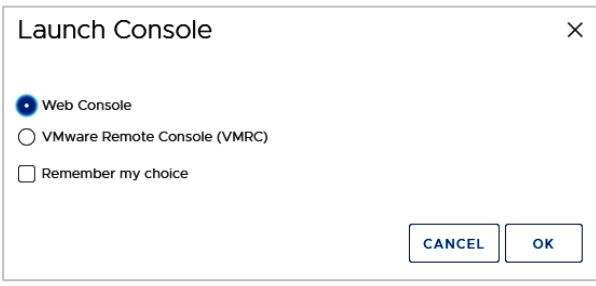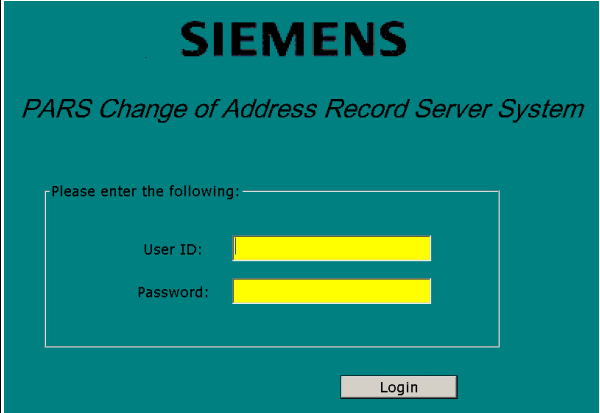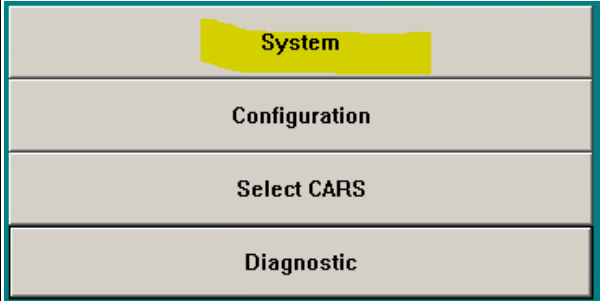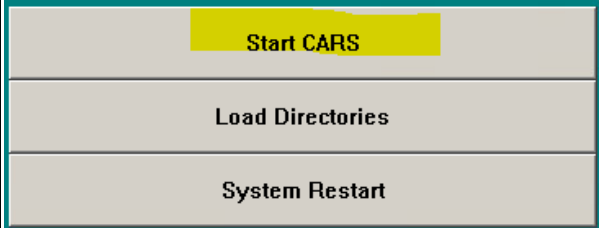|					
	* -- The tasks marked with one asterisk are per unit tasks				
	** -- The tasks marked with two asterisks are critical tasks				
	Frequency Codes (1 Accounting Period (AP) = 4 Weeks)				
Code	**Frequency**	**Description**	**Code**	**Frequency**	**Description**
A	ANNUAL	Once every 13 APs	B	BI-WEEKLY	Once every half AP
C	BI-MONTHLY	Once every 2 APs	D	DAILY	Once a day; 7 days a week
E	DAILY	Once a day; 6 days a week	F	DAILY	Once a day; 5 days a week
G	DAILY	Once a day; 4 days a week	H	DAILY	Once a day; 3 days a week
J	SEMI-WEEKLY	2 days a week	K	BI-ANNUAL	Once every 26 APs
L	tdl-ANNUAL	Once every 39 APs	M	MONTHLY	Once every AP
N	QUAD-ANNUAL	Once every 52 APs	P	QUINT-ANNUAL	Once every 65 APs
Q	QUARTERLY	4 times every 13 APs	S	SEMI-ANNUAL	Twice every 13 APs
T	TOURLY	3 times a day; 7 days a week	U	TOURLY	Twice a day; 7 days a week
V	TOURLY	3 times a day; 6 days a week	W	WEEKLY	Once 1/4 AP (1 week)
X	TOURLY	Twice a day; 6 days a week	Y	TOURLY	3 times a day; 5 days a week
Z	TOURLY	Twice a day; 5 days a week			
WI(*)	WEEKS INTERVAL	Perform a task once every # weeks e.g., WI (60) = Once every 60 weeks # = number of weeks			

ATTACHMENT 2

PARS MASTER CHECKLIST

03-PARS-**-001-M

PREVENTIVE MAINTENANCE (PM)

Time Total: (36) minutes

U.S. Postal Service	IDENTIFICATION											
Maintenance Checklist	WORK CODE	EQUIPMENT ACRONYM						CLASS CODE		NUMBER		TYPE
	0 3	P	A	R	S				*	*	0 0 1		M
Equipment Nomenclature Postal Address Redirection System	Equipment Model vPARS				Bulletin Filename mm22077				Occurrence Calendar			

Part or Component	Item No	Task Statement and Instruction (Comply with all current safety precautions)	Est. Time Req (min)	Min. Skill Lev	Thresholds		
					Run Hours	Pieces Fed (000)	Freq.
SAFETY STATEMENT	1	**COMPLY WITH ALL SAFETY PRECAUTIONS.** Disconnect power and apply lockouts when required by this instruction. Refer to current local lockout procedures to properly shut down and lock out this machine. Check for suspicious dust or unusual debris. If any unusual substance is found, notify supervisor prior to proceeding with any further action on the equipment. **THE USE OF COMPRESSED OR BLOWN AIR IS PROHIBITED.** When cleaning is required, an alternative cleaning method such as a HEPA filtered vacuum cleaner, or a damp rag must be used in place of compressed or blown air. A lint-free cloth or brush may be used on optical equipment only when other cleaning methods cannot be used. Report safety deficiencies to your supervisor immediately upon detection. **WARNING FOR EWP/PPE:** Steps contained in this bulletin may require the use of Electrical Work Plan (EWP) Personal Protective Equipment (PPE). Refer to the current EWP MMO or appropriate EWP PPE and barricade requirements. **WARNING FOR SDS:** Various products requiring Safety Data Sheets (SDS) may be utilized during the performance of the procedures in this bulletin. Ensure the current SDS for each product used is on file and available to all employees. When reordering such a product, it is suggested that current SDS be requested. Refer to SDS for appropriate personal protective equipment.	1	All			

Part or Component	Item No	Task Statement and Instruction (Comply with all current safety precautions)	Est. Time Req (min)	Min. Skill Lev	Thresholds		Freq.
					Run Hours	Pieces Fed (000)	
VPARS SYSTEM: VIRTUAL COMPUTERS	2	**Restart Virtual Servers (CARS)** 1. Type the following address into the Chrome browser, **https://nrmnokmvcsaprod.usps.gov/** **NOTE** ET must have access to vSphere. Request from **eAccess** (Figure 4-2). 2. Select **Advanced**, and then select **Proceed to nrmnokmvcsaprod.usps.gov (unsafe)**. 3. Select **LAUNCH VSPHERE CLIENT (HTML5)**. 4. Log into the **vCenter** using ACE ID and password. Example: [ACE ID]@usa.dce.usps.gov 5. Upon successful vCenter login, select the **VMs and Templates** icon. 6. On the left-window panel, locate the PARS VM cluster associated with the site.	10	10			D

Part or Component	Item No	Task Statement and Instruction (Comply with all current safety precautions)	Est. Time Req (min)	Min. Skill Lev	Thresholds		
					Run Hours	Pieces Fed (000)	Freq.
		7. Click on the dropdown **arrow >** to drill down to the appropriate PARS VM. 8. Launch Web Console for **CARS0** and log into the CARS account.					

Part or Component	Item No	Task Statement and Instruction (Comply with all current safety precautions)	Est. Time Req (min)	Min. Skill Lev	Thresholds		
					Run Hours	Pieces Fed (000)	Freq.
		9. Login to Siemens CARS server system.					
		10. Select **System** from the Main menu.					
		11. Select **Start CARS**.					
		12. From the Select CARS dropdown, select **All CARS**.					
		13. From Select a Task, select **Start CARS** (Figure 4-3).					
		14. Click **Yes** to confirm restart.					
		15. When system restart completes, login and verify the CARS system is operational by ensuring all CARS lights are green in the slave CARS Status window.					
		16. Close web console.					

Part or Component	Item No	Task Statement and Instruction (Comply with all current safety precautions)	Est. Time Req (min)	Min. Skill Lev	Thresholds		
					Run Hours	Pieces Fed (000)	Freq.
VPARS SYSTEM: VIRTUAL COMPUTERS	3	**Reboot (CARS)** 1. Launch Web Console for **CARS0**. 2. Log into the CARS account. 3. Login to Siemens screen using the same CARS account. 4. From Main menu, select **System**. 5. From System menu, select **System Restart**. 6. From Select CARS(s) drop down, select **All CARS** (Figure 4-3). 7. From Select a task field, select the **Hardware Shutdown** button. 8. Select **Yes** to confirm the shutdown. 9. Once the system shutdown completes, bring the system back up and verify the CARS system is operational by ensuring all CARS lights are green in the Slave CARS Status window. 10. Close web console.	10	10			W
VPARS SYSTEM: COMPUTER	4	**Clean Server Components** 1. Clean exterior of computer using a vacuum cleaner, glass cleaner, and lint-free static-free cleaning towels. 2. Clean exterior of the vPARS cabinet.	10	09			M

Part or Component	Item No	Task Statement and Instruction (Comply with all current safety precautions)	Est. Time Req (min)	Min. Skill Lev	Thresholds		
					Run Hours	Pieces Fed (000)	Freq.
FINAL CLEANUP	5	**Clean Up** 1. Ensure all cleaners, towels, vacuum, etc., are removed from the work area. 2. Note any deficiencies and generate a work order/report them to supervisor.	5	ALL			

The tasks marked with one asterisk *, after the time required, are per unit tasks.

The tasks marked with two asterisks **, after the item number, are critical tasks.

<u>ATTACHMENT 3</u>

P&DC AND REC PARS MASTER CHECKLIST

09-PARS-**-001-M

OPERATIONAL MAINTENANCE (OM)

Time Total: (3) minutes

** Class Codes VA, VB

U.S. Postal Service	IDENTIFICATION									
Maintenance Checklist	WORK CODE	EQUIPMENT ACRONYM					CLASS CODE		NUMBER			TYPE
	0	9	P	A	R	S			*	*	0	0	1	M
Equipment Nomenclature Postal Address Redirection System	Equipment Model vPARS					Bulletin Filename mm22077			Occurrence Daily			

Part or Component	Item No	Task Statement and Instruction (Comply with all current safety precautions)	Est. Time Req (min)	Min. Skill Lev	Thresholds		
					Run Hours	Pieces Fed (000)	Freq.
SAFETY STATEMENT	1	**COMPLY WITH ALL SAFETY PRECAUTIONS.** Disconnect power and apply lockouts when required by this instruction. Refer to current local lockout procedures to properly shut down and lock out this machine. Check for suspicious dust or unusual debris. If any unusual substance is found, notify supervisor prior to proceeding with any further action on the equipment. **THE USE OF COMPRESSED OR BLOWN AIR IS PROHIBITED.** When cleaning is required, an alternative cleaning method such as a HEPA filtered vacuum cleaner, or a damp rag must be used in place of compressed or blown air. A lint-free cloth or brush may be used on optical equipment only when other cleaning methods cannot be used. Report safety deficiencies to your supervisor immediately upon detection. **WARNING FOR EWP/PPE:** Steps contained in this bulletin may require the use of Electrical Work Plan (EWP) Personal Protective Equipment (PPE). Refer to the current EWP MMO or appropriate EWP PPE and barricade requirements. **WARNING FOR SDS:** Various products requiring Safety Data Sheets (SDS) may be utilized during the performance of the procedures in this bulletin. Ensure the current SDS for each product used is on file and available to all employees. When reordering such a product, it is suggested that current SDS be requested. Refer to SDS for appropriate personal protective equipment.	1	All			

Part or Component	Item No	Task Statement and Instruction (Comply with all current safety precautions)	Est. Time Req (min)	Min. Skill Lev	Thresholds		
					Run Hours	Pieces Fed (000)	Freq.
OPERATIONAL MAINTENANCE FOR CARS	2	**Verify CARS operations.** 1. At the master CARS UI, check the system status and directory status. If a problem is found, correct it, or notify maintenance management. 2. Log on to the master CARS UI (Main menu Figure 4-5). 3. Verify all slave CARS are communicating with the master CARS, all CARS should be ready. 4. Verify that the Base Dir: is current, the date should not be more than 14 days old. 5. Verify that the Daily Update is current, not more than 2 days old.	2	10			T

The tasks marked with one asterisk *, after the time required, are per unit tasks.

The tasks marked with two asterisks **, after the item number, are critical tasks.

THIS PAGE BLANK

ATTACHMENT 4

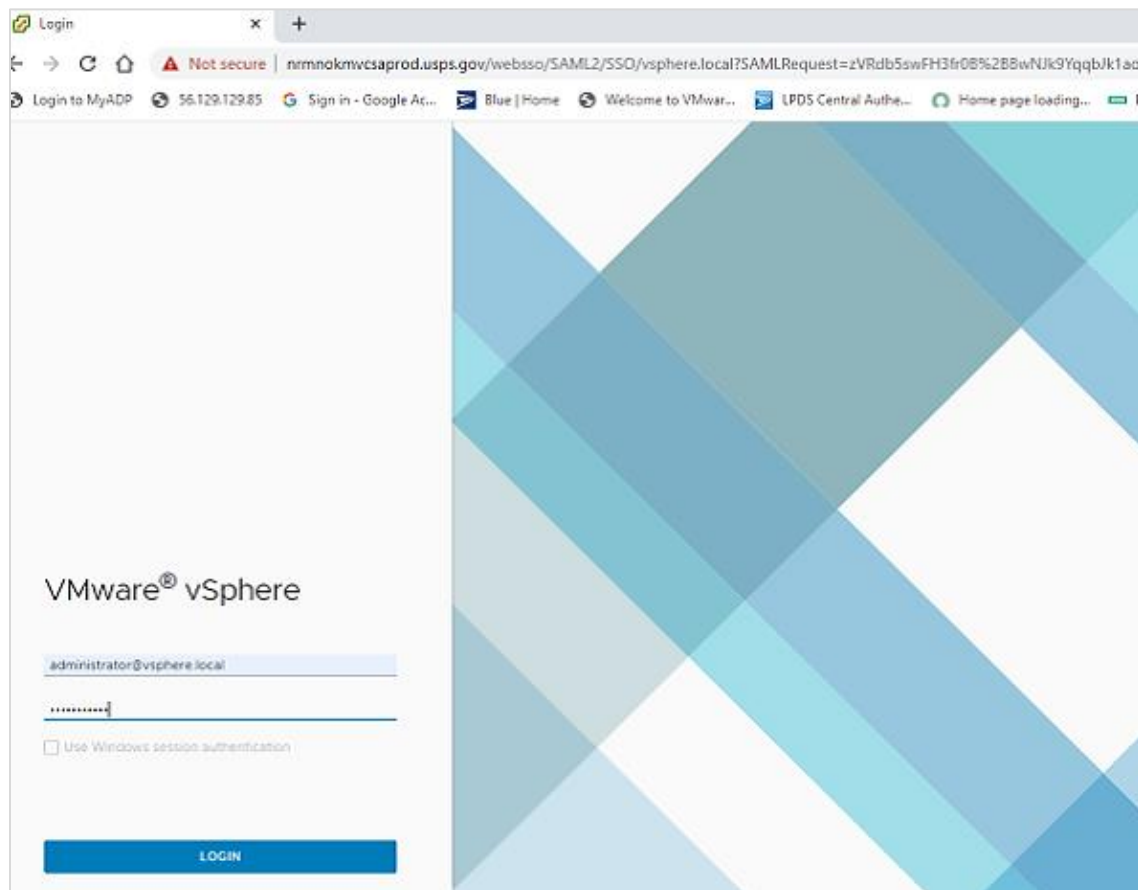**ILLUSTRATIONS FOR ATTACHMENT 2, 3,**

AND LIST OF FEEDER SITES
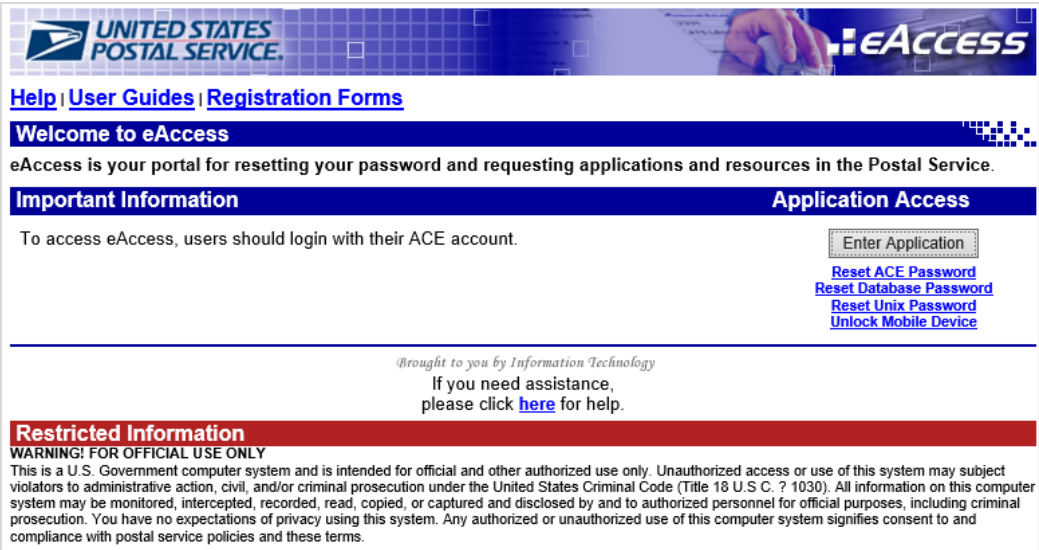

Figure 4-1. Logging into vCenter
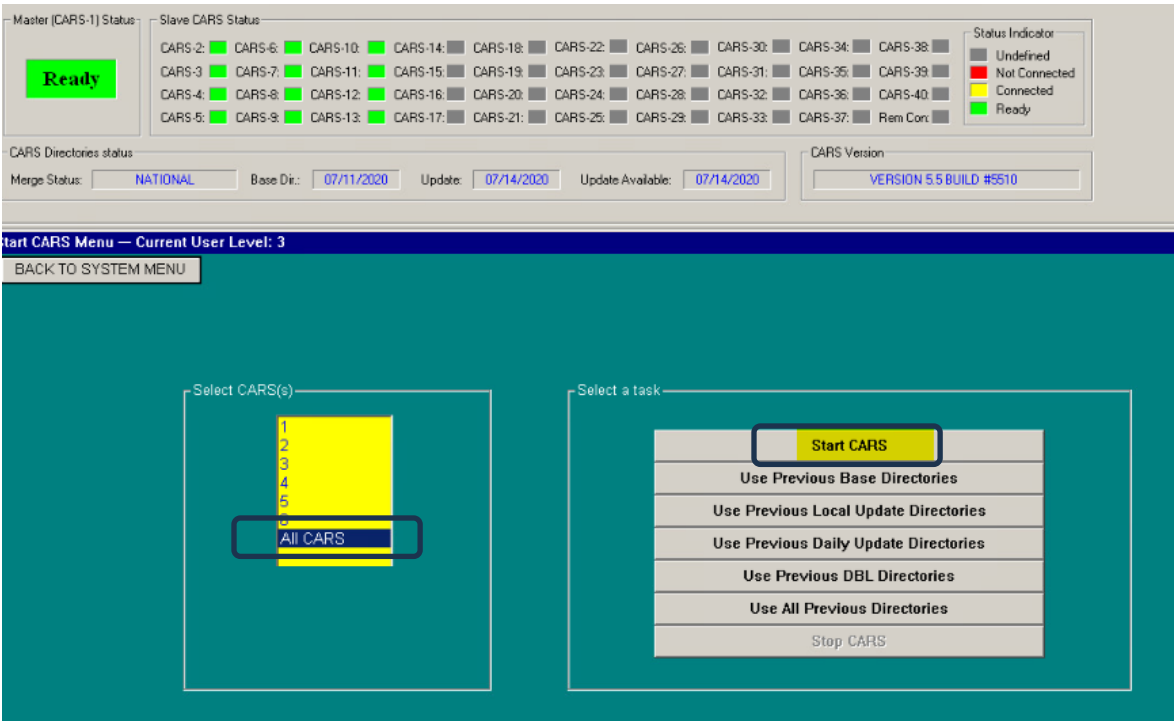
Figure 4-2. eAccess

Figure 4-3. Start CARS Menu
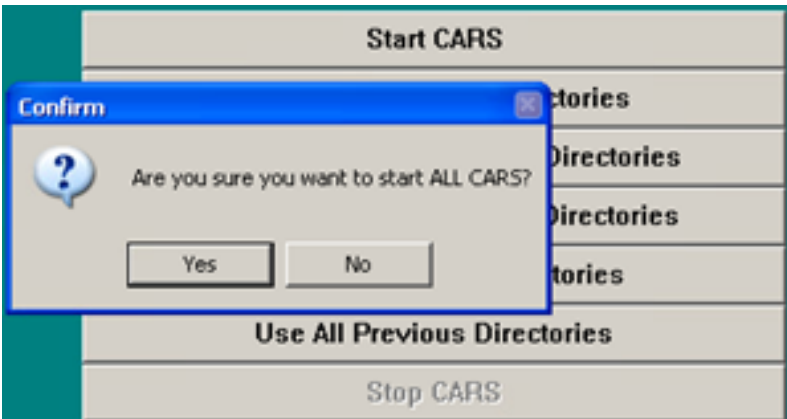
Figure 4-4. Confirm Start ALL CARS
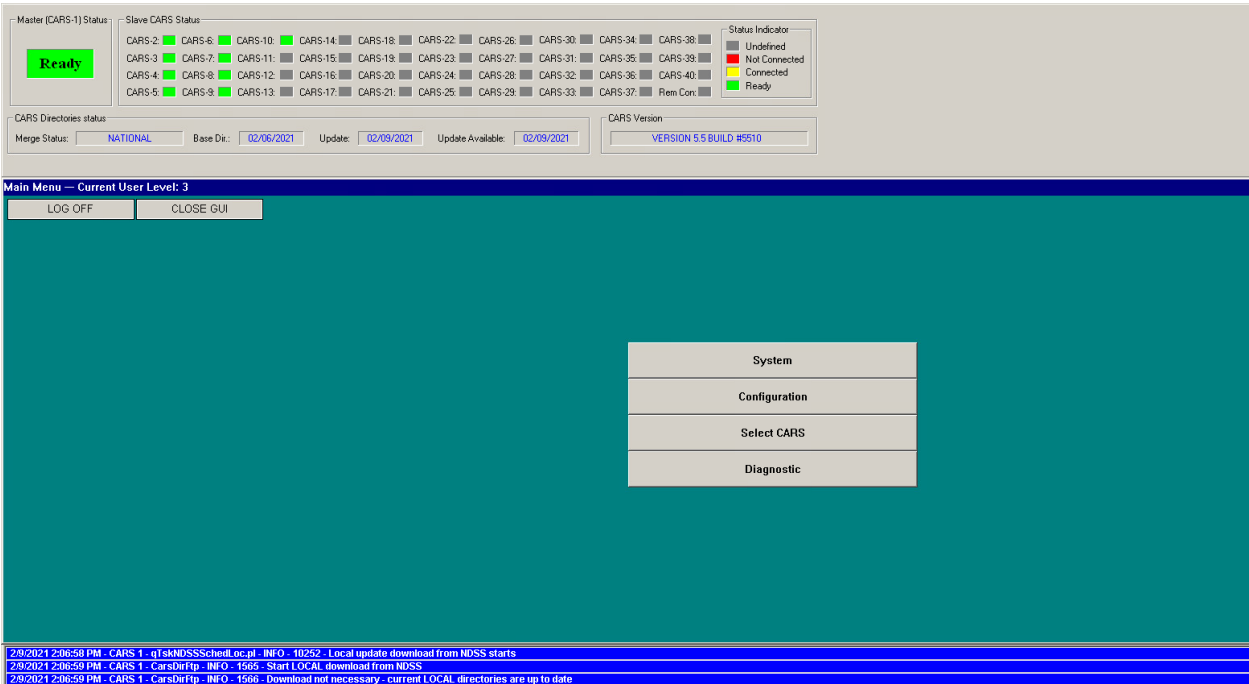
Figure 4-5. Main Menu, All CARS Ready

Table 4-1. PARS Host and Feeder Sites

Feeder Sites Name	Letter PARS	FPARS
Eastern Shore MD - (EAONMD)	X	
Lafayette LA - (LFYTLA)	X	
New Orleans LA - (NORLLA)	X	
Huntsville AL - (HNTSAL)	X	
Montgomery AL - (MTGMAL)	X	
Champaign IL - (CHMPIL) *FPARS	X	X
Chicago (Cardiss Collins) IL - (CHCGIL)	X	
Palatine IL - (PLTNIL)	X	

Feeder Sites Name	Letter PARS	FPARS
Peoria IL - (PEORIL)	X	
South Suburban IL - (BDFPIL)	X	
Boston MA - (BSTNMA) *FPARS	X	X
Brockton MA - (BRCKMA)	X	
Burlington VT - (ESXJVT)	X	
Eastern (Hampton) ME - (HMPDME)	X	
Manchester NH - (MNCHNH)	X	
Providence RI - (PRVDRI)	X	
Southern ME - (SCRBME)	X	
White River Junction VT - (WHRJVT)	X	
Youngstown - (YNGSOH)	X	
Cheyenne WY - (CHYNWY) *FPARS	X	X
Denver CO - (DNVRCO)	X	
Grand Junction CO - (GRNRCO)	X	
Cincinnati OH - (CNCNOH)	X	
Dayton OH - (DYTNOH)	X	
Toledo OH - (TOLDOH)	X	
Abilene TX - (ABLNTX)	X	
Amarillo TX - (AMRLTX)	X	
Dallas TX - (DALSTX)	X	
Ft. Worth TX - (FRTWTX)	X	
Lubbock TX - (LBCKTX)	X	
Cedar Rapids IA - (CDRRIA)	X	
Quad Cities IA - (MILNIL)	X	
Waterloo IA - (WTRLIA)	X	
Grand Rapids MI - (GRNRMI) *FPARS	X	X
Grand Rapids Annex MI - (GRNAMI)	X	
Lansing MI - (LNSNMI)	X	
Michigan Metroplex MI - (PNTCMI)	X	
Traverse City MI - (TRVCMI)	X	
Midland TX - (MDLNTX)	X	
Bismarck ND - (BSMRND)	X	
Grand Forks ND - (GRNFND)	X	
Manasota FL - (MNSTFL)	X	
Mid Florida (Lake Mary) FL - (LKMRFL)	X	
Orlando FL - (ORLNFL)	X	
Tampa FL - (TAMPFL)	X	
Gainesville FL - (GNSVFL) *FPARS		X
Roanoke VA - (RONKVA) *FPARS	X	X
Charleston SC - (CHRLSC)	X	
Columbia SC - (CLMBSC)	X	
Lehigh Valley PA - (BTHMPA)	X	
Philadelphia PA - (PHLDPA)	X	

Feeder Sites Name	Letter PARS	FPARS
South Jersey NJ - (BLMWNJ)	X	
Wilmington DE - (WLMNDE)		
Albany NY - (ALBNNY) *FPARS	X	X
Southern CT - (WLNDCT)	X	
Ft. Wayne IN - (FRTEIN) *FPARS	X	X
Gary IL - (GARYIN)	X	
Muncie IN - (MUNCIN)	X	
South Bend IN - (SBNDIN)	X	
Gulfport MS - (GLFPMS)	X	
Gainesville FL - (GNSVFL)	X	
Mobile AL - (MOBLAL)	X	
Pensacola FL - (PNSCFL)	X	
Tallahassee FL - (TLHSFL)	X	
Springfield MO - (SPFLMO)	X	
Northwest Arkansas - (FYTVAR)	X	
Evansville IN - (EVNSIN)	X	
Lexington KY - (LXNGKY)	X	
Paducah KY - (PDCKKY)	X	
Louisville Annex KY - (LSVLKYA) *FPARS	X	X
Merrifield VA - (MRFLVA) *FPARS		X
West Palm Beach FL - (WPLBFL)	X	
Central (Wausau) WI - (RTHSWI) *FPARS	X	X
Green Bay WI - (GRBYWI)	X	
Iron Mountain MI - (KNGNMI)	X	
Madison WI - (MDSNWI)	X	
Duluth MN - (DLTHMN) *FPARS	X	X
Eau Claire WI - (ECLRWI)		
Mankato MN - (MNKTMN)	X	
Rapid City SD - (RPDCSD)	X	
Saint Cloud MN - (WTPRMN)	X	
Saint Paul MN - (SAPLMN)	X	
Sioux Falls SD - (SXFLSD)	X	
Brooklyn NY - (BRKLNY)	X	
Mid Island NY - (MLVLNY)	X	
Westchester - (WHTPNY)	X	
Western Nassau (Garden City) NY - (GRDCNY)	X	
Chattanooga TN - (CHTNTN)	X	
Johnson City TN - JHNCTN)	X	
Knoxville TN - (KNXVTN)	X	
Beaumont TX - (BMNTTX) *FPARS	X	X
Atlanta GA - (ATLNGA)	X	
Augusta GA - (AGSTGA)	X	
Macon GA - (MACNGA)	X	

Feeder Sites Name	Letter PARS	FPARS
Dominic V Daniels (DVD) NJ - (KRNYNJ)	X	
Mid Hudson NJ - (NWBRNY)	X	
Trenton NJ - (TRENNJ)		
Tulsa OK - (TULSOK) *FPARS	X	X
Grand Island Annex NE - (GRNINE)	X	
Lincoln NE - (LNCLNE)	X	
Norfolk NE - (NRFLNE)	X	
Los Angeles CA - (LNGLCA) *FPARS	X	X
San Bernardino CA - (RDLNCA)	X	
San Diego CA - (SADGCA)	X	
Bakersfield CA - (BKRSCA) *FPARS	X	X
Santa Ana CA - (SAANCA)	X	
Santa Barbara CA - (GOLTCA)	X	
Santa Clarita CA - (SCLACA)	X	
Tucson AZ - (TCSNAZ)	X	
Altoona PA - (DNCEPA) *FPARS	X	X
Erie PA - (ERIEPA)	X	
Johnstown PA - (JHNSPA)	X	
Bend OR - (BENDOR)	X	
Eugene OR - (SPFLOR)	X	
Medford OR - (MDFROR)	X	
Fayetteville NC - (FYTVNC)	X	
Rocky Mount NC - (RCKMNC)	X	
Norfolk VA - (NRFLVA)	X	
Buffalo NY - (BUFLNY)	X	
Syracuse NY (SYRCNY)	X	
Fresno CA - (FRSNCA) *FPARS	X	X
Oakland CA - (OKLNCA)		
North Bay CA - (PTLMCA)	X	
San Francisco CA - (SFROCA)	X	
San Jose CA - (SAJSCA)	X	
W. Sacramento CA - (WCRCA)	X	
Cape Girardeau MO - (CPGRMO)	X	
Columbia MO - (CLMBMO)	X	
Springfield IL - (SPFLIL)	X	
Boise ID - (BOISID)	X	
Pocatello ID - (PCTLID)	X	
Provo UT - (PROVUT)	X	
Salt Lake City Annex - (SLLCUTA) *FPARS		X
Corpus Cristi TX - (CRPCTX)	X	
McAllen TX - (MCLNTX)	X	
Tacoma WA - (TACMWA) *FPARS	X	X
Dulles VA - (DULSVA)	X	

Feeder Sites Name	Letter PARS	FPARS
Merrifield VA - (MRFLVA)	X	
Suburban MD - (GTHRMD)	X	
Washington (Curseen-Morris) DC - (WSHNDC)	X	
Wenatchee WA - (WNTCHWA)	X	
Yakima - (YAKMWA)	X	
West Valley AZ - (PHX3AZ) *FPARS	X	X

*FPARS Sites