





# Navy Cash Training Sales Unit 3: Maintenance Procedures



#### **Objectives**

- Discuss basic maintenance and troubleshooting procedures on a MT-280
- How to access the ITC CAD Diagnostic Menu
- Discuss basic troubleshooting procedures on an ITC
   CAD
- Explain procedures to add or remove a Vending Machine
- Discuss replacement of ITC CADs





# Maintenance and Troubleshooting Procedures





#### Preventive Maintenance

- Weekly
  - Clean card readers on the MX-925 (Fixed POS in Disbursing), MT 280, KIOSK, and CADs
    - » Use card reader cleaners
- Basic Troubleshooting
  - NC SOP
  - Maintenance Videos
- Technical Support
  - Phone: Navy Cash CSU 1-866-662-8922
  - E-mail: navycashcenter@frb.org





#### Troubleshooting NC Equipment

- Communication Troubleshooting
  - Communications Troubleshooting Guide
    - » Appendix S of NC SOP
- Basic Troubleshooting
  - NC SOP
  - Maintenance Videos
- Technical Support
  - Phone: Navy Cash CSU 1-866-662-8922
  - E-mail: navycashcenter@frb.org





# MT-280 Troubleshooting Procedures





- Rebooting the MT 280 should always be the first step in troubleshooting
- Clean or replace SAM chip
- Replace SD card
- Replace any faulty MT 280 with a new unit. Each ship is issued several spares.







- Error Messages:
  - Error Initializing SAM
    - » May occur during MT 280 initialization because SAM is not present
      - Action: Install SAM in MT 280 device
  - Error Authenticating Card
    - » Card is blocked
      - Action: Have cardholder report to Disbursing





Error Initializing SAM screen







- Error Messages (cont)
  - Examples:
    - » SD Card Error SD card is not present or SD card message queue is full
      - Action: Install SD card or if MT 280 is offline and SD card is full, plug MT 280 into network connection point
    - » SAM Error SAM needs to be replaced
      - Action: Clean SAM or replace SAM
    - » Boot up Errors (various) occur when starting MT 280
      - Action: Insert good SAM or SD Card, or reboot MT 280





## CAD Diagnostic Screens

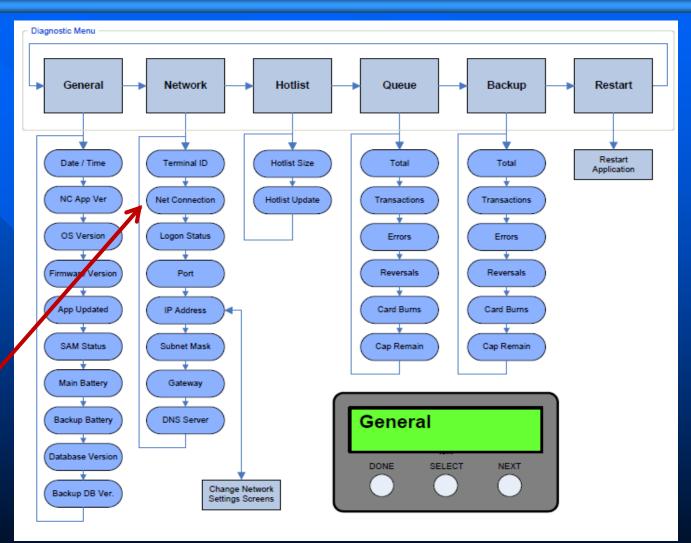




#### CAD Diagnostic Groups

Provide tools that can be helpful in managing, diagnosing, and solving problems with the CAD

Network Connectivity Status
Online/Offline









- To access the CAD
  Diagnostic Screen,
  press the left button
  for @ least 3 seconds
- Buttons are located below the screen and above the card reader.







CAD displays the "CAD Diagnostics" screen



Select "Start" by pressing the middle button to continue to the first diagnostic group







CAD displays the first diagnostic group, i.e. "General"



Press the right (Next) button until the desired diagnostic group is displayed Example:

Press the right button 4 times to access the "Queue" group







"Queue" group is displayed



Press "Select" to view the Total number of messages
Then, press "Select" or "Next" button to view the
total Transactions in the queue







The total number of "Transactions" should read "zero"

#### Note:

If other than zero, STOP and investigate. Do not close machine until number of transactions shows zero or open a case number with CSU for assistance



Press the left (Done) button twice to exit

# CAD Troubleshooting Procedures





- Verify if ship's network is up
  - If network is down, do not cycle power
  - CAD can operate in offline mode
- Verify if routers are powered on
- Check the cables from the CADs to the routers
- Cycle power to the vending machine (turn off and turn on vending machine)
- Clean SAM chip or Replace SAM chip
- Check SD card
- Replace CAD from stock





- For Technical Assistance
  - Contact Navy Cash Central Support Unit (CSU)
  - CSU will assign a case number that will be used to track the trouble call
  - CSU will handle trouble call directly or forward it to the proper person
  - Use Navy Cash Trouble Call Worksheet





#### Failed CADs

- When directed to return CAD to NC Depot, record the traceable tracking number and date shipped on the Trouble Call Worksheet
- Include Case # assigned by CSU and equipment serial number

#### Stuck transactions

- When directed, CADs with stuck transactions are sent to Cogent Systems
- Record the traceable tracking number and date ship on the Trouble Call Worksheet
- Include Case # assigned by CSU and equipment serial number
- Sales retain copy of Trouble Call Worksheet with monthly report





#### Card Readers

- Proper cleaning of the card readers can significantly reduce the incidence of card readers failing to read a Navy Cash Card
- Shipboard Network or NC Server down for extended period
  - Revert to accepting cash (if authorized by CO)
  - Replace CAD with a dollar bill validator and/or turning on the coin changer





- Error Messages are displayed if:
  - SD Card is not present
  - CAD is disabled
  - Vending Machine is out of stock
  - System Error
  - Examples:
    - » Out of Service-SD no SD card in the CAD
      - Insert SD card
    - » CAD Disabled no communications between CAD and MDB interface



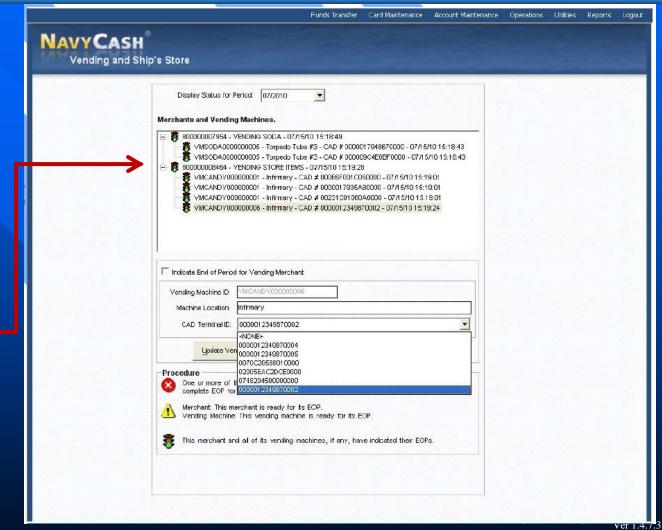


# Add/Remove Vending Machine and Changing CAD





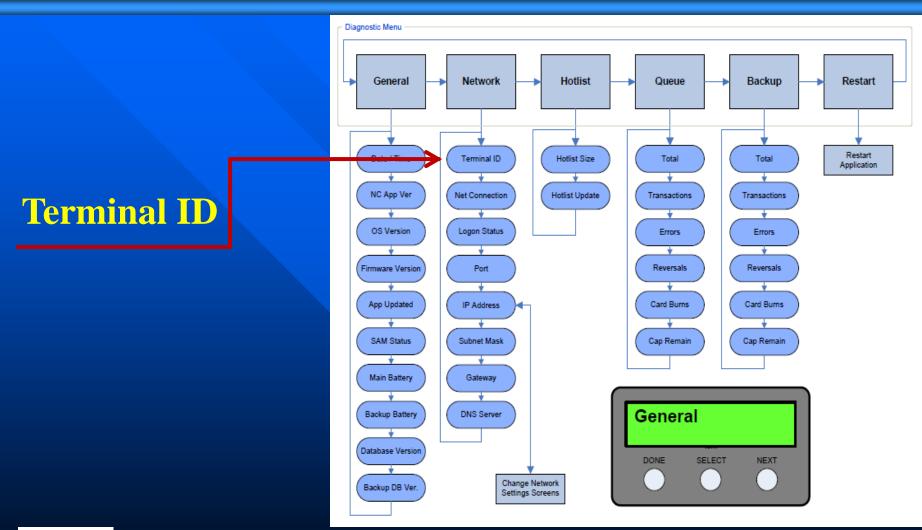
#### Vending and Ship's Store Screen



Merchants and Vending
Machine Menu Tree
•Expand (+)
•Collapse (-)



#### **CAD Diagnostic Information**





#### Adding a Vending Machine

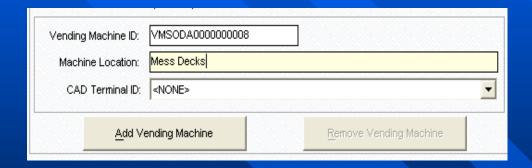
- Ship's responsibility
  - To add a vending machine and CAD
  - Contact Navy Cash CSU
  - Pull cabling from nearest Navy Cash router
  - Hook up new machine
  - Set up new machine in the Navy Cash System Configuration
  - may contact NC Depot for assistance (any costs will be borne by the ship)
- No transactions can occur
  - CAD must be associated with the Vending Machine in
     the Disbursing Application





#### Adding a Vending Machine - cont.

- Log in to the Navy Cash Disbursing Application
- Select "Vending and Ship's Store" link
- Expand the Merchants and Vending Machines menu tree
- Enter the New Vending Machine ID and location



- Select the CAD Terminal ID from the pull down menu
- Click on "Add Vending Machine" button





#### Removing a Vending Machine

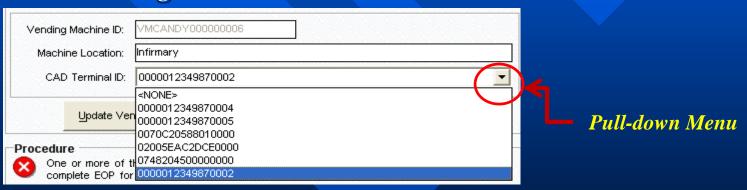
- Log in to the Navy Cash Disbursing Application
- Select "Vending and Ship's Store" link
- Expand the Merchants and Vending Machines menu tree
- Highlight the appropriate Vending Machine
- Click on "Remove Vending Machine" button
- Keep the Navy Cash Ethernet and MDB cables
  - » Use the same cables when adding a new vending machine
- Note: When removing a CAD, ensure all transactions have been downloaded.





#### Changing a CAD

- Log in to the Disbursing App
- Click on "Vending and Ship's Store" link
- Expand the Merchants and Vending Machines menu tree
- Highlight the appropriate Vending Machine
- Select the appropriate CAD Terminal ID from pull down menu
- Click "Update Vending Machine Data" button



Note: When changing/removing a CAD, verify that all transactions have been downloaded to the Navy Cash Server.



## Questions

