Navy Cash Training
Sales Unit 3:
Maintenance Procedures

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Objectives

- Discuss basic maintenance and troubleshooting procedures on an iPA-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

Preventive Maintenance

- **Weekly**
  - Clean card readers in the IPA 280s, KIOSKs, 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

IPA-280 Troubleshooting Procedures

Troubleshooting POS

- Rebooting the POS should always be the first step in troubleshooting
  - Touch small RESET button with a stylus
- Clean or replace SAM chip
- Replace SD card
- Replace any faulty POS with a new unit. Each ship is issued several spares.

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Troubleshooting POS

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

Troubleshooting POS

- 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 POS is offline and SD card is full, plug POS into network connection point
    - » *SAM Error* – SAM needs to be replaced
      - Action: Clean SAM or replace SAM
    - » *Boot up Errors* (various) – occur when starting POS
      - Action: Insert good SAM or SD Card, or reboot POS

Other iPA-280 Errors

- Failed SD Card
  - *Error: Initializing Backup Database*
  - *Error: Opening Backup Data*
  - *Actions: For both errors above, Replace SD Card, Power off /on the POS*

iPA 280 Batteries

- **Two Batteries**
  - Lithium-ion battery
    - » Good for a normal day use
  - Backup battery (button cell)
    - » imbedded in the motherboard of the POS
    - » Cannot be removed
    - » *prevent data loss when changing* rechargeable battery

Lithium-ion Battery

iPA 280 Batteries

- Both batteries are rechargeable
- If the batteries both lose their charge, the date/time data on iPA 280 will be lost
  - Current date defaults to year 2000
  - *At this point iPA 280 will not work*
  - Error Message " *Card Initial date after current date*" is displayed

iPA 280 Batteries

- Action
  - If both batteries discharge, the POS must be charged and connected so it can get the correct date/time and be functional again
  - When using iPA 280, always ensure main battery pack (lithium-ion) is fully charged
    - Battery indicator is displayed at the top of screen

NavyCash Logoff

    - Replace battery with good battery before the back-up battery is discharged

ITC 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
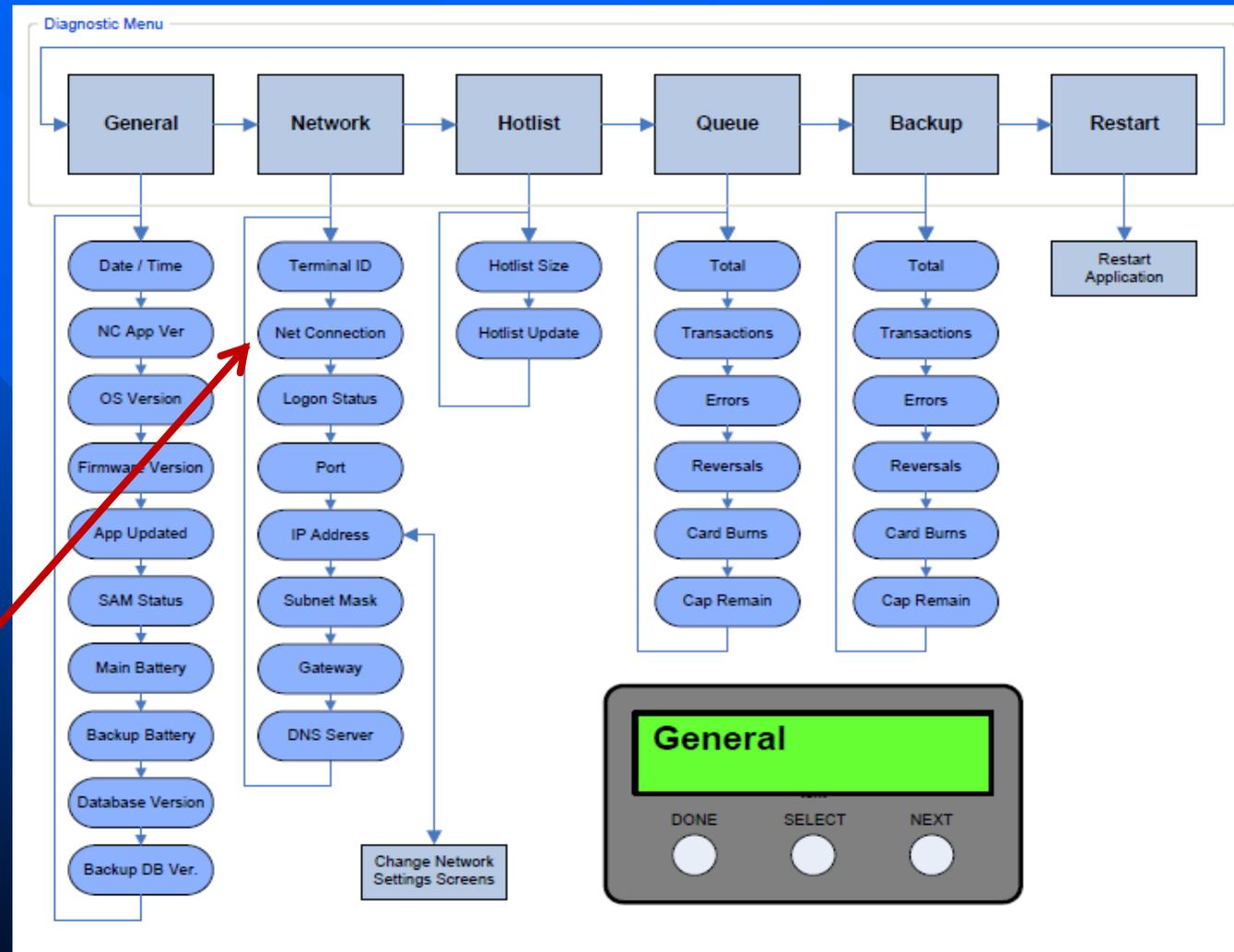
CAD Diagnostics Navigation

- *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 Diagnostics Navigation

CAD displays the "CAD Diagnostics" screen

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

CAD Diagnostics Navigation

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

CAD Diagnostics Navigation

"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*

CAD Diagnostics Navigation

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

ITC CAD Troubleshooting Procedures

Troubleshooting CAD

- 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

Troubleshooting CAD

- 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

Troubleshooting CAD

- **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

Troubleshooting CAD

- ## 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

Troubleshooting CAD

- 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

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Add or Remove a Vending Machine

and

Changing CADs

Adding a Vending Machine

- Ship's responsibility
  - To add/replace a vending machine
  - Install CAD in the new Vending Machine
  - 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)
    - » *Notes: 1. No transactions can occur*
    - *2. CAD must be associated with the Vending Machine on the Disbursing Application*

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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
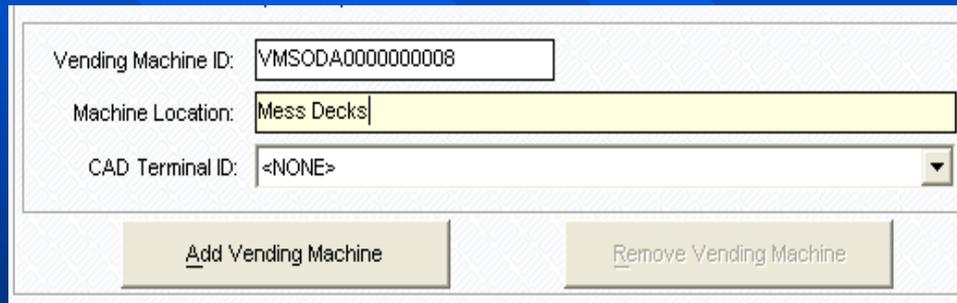
Vending Machine ID:	VMSODA0000000008
Machine Location:	Mess Decks
CAD Terminal ID:	<NONE>

Add Vending Machine   Remove Vending Machine

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

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Redefining Ingenuity

NAVY CASH

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Vending and Ship's Store Screen

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

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CAD Diagnostic Information

Terminal ID
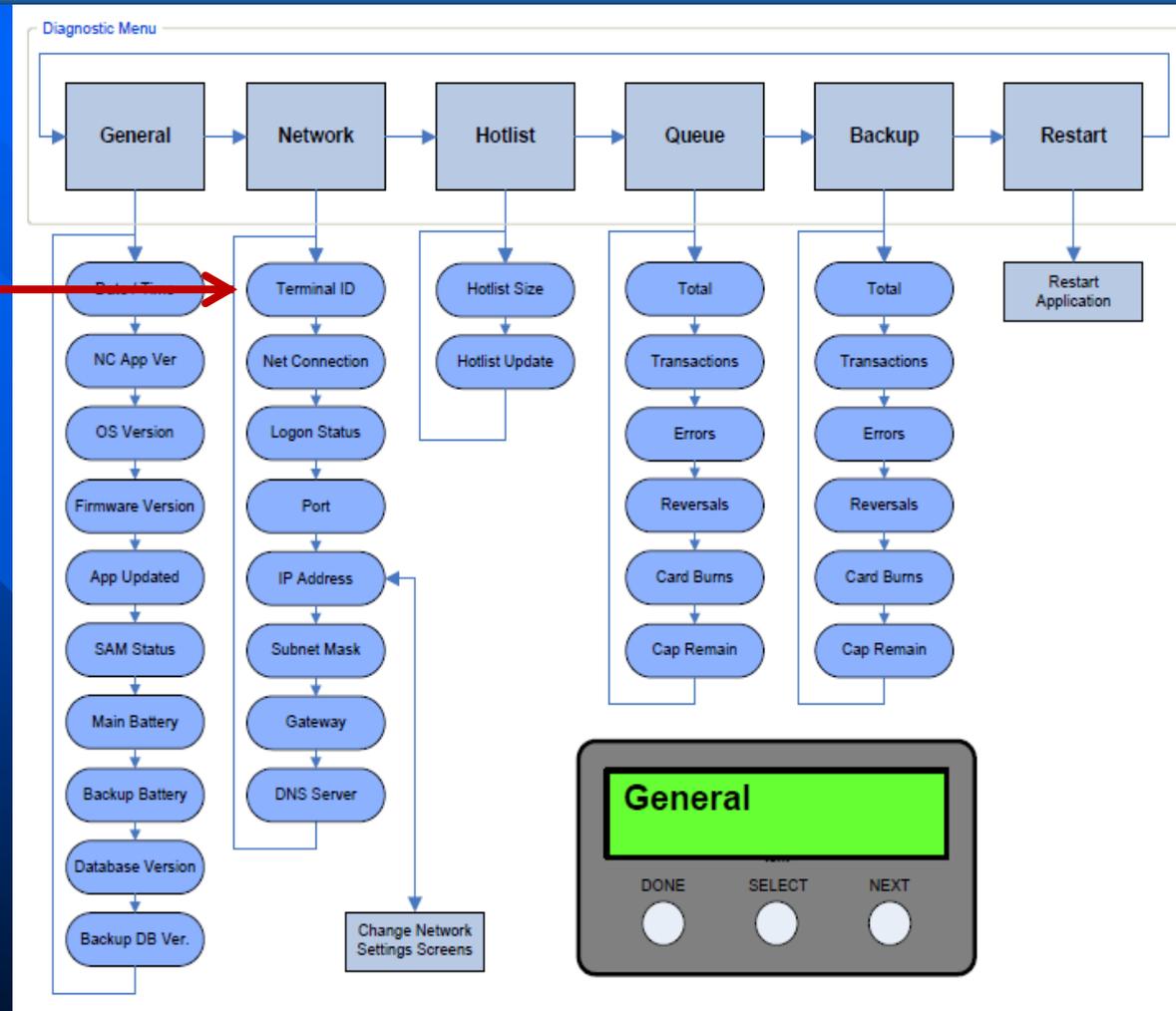
Removing a Vending Machine

- 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.*

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SAIC — Redefining Ingenuity

NAVY CASH

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

Pull-down Menu

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

Questions

SALES UNIT 3 REVIEW

1. What causes the date on a POS Device to revert back to year 2000 and how do you fix it?

2. How do you access the CAD diagnostic screens?

3. Where do you find a CAD's Terminal ID?