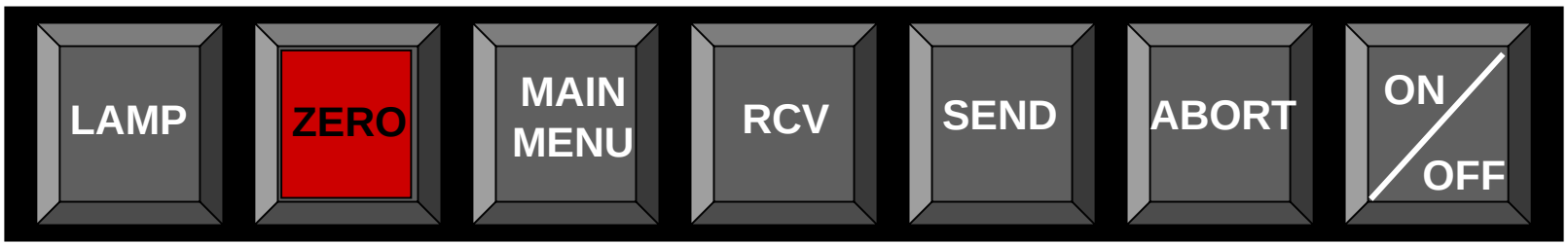
AN/CYZ-10 DATA TRANSFER DEVICE (DTD) TRAINING

DTD INITIALIZATION PROCEDURES

DTD INITIALIZATION

- **ZEROIZATION - Erases All COMSEC, All Data on the Host Side of the DTD, All CIK Association and Requires the DTD to be Re-initialized.**
  - **Fastest/Easiest Method of Destroying ALL KeyMat Contained in the DTD**
  - **May Be Initiated With or Without a CIK**
  - **Is Recorded in the Audit Data, but Does Not Reset the Audit Trail**



- **With Power ON, Press the Red ZERO Button Three Times in Succession.**
- **With Power OFF, Press the Red ZERO Button Once, Then Press the Red ZERO Button Three Times in Succession.**
- **Removing the Power Source (Batteries) From the DTD (for Approximately 3-10 Mins) Will Achieve the Same Results.**

DTD INITIALIZATION

Before a DTD Can Be Used, It Must be Initialized

INITIALIZATION Consists of Performing a Cold Boot and Creating Supervisor and User Crypto Ignition Keys (CIK).

To Begin the Initialization Process:

DEPRESS: ON/OFF

DTD INITIALIZATION

SYSTEM LOADING...

DISP TEST ABCDEFGHIJKLM
NOPQRSTUVWXYZ0123456789

KEY TEST [ABORT] TO EXIT

KEY TEST [ABORT] TO EXIT
KEYBOARD TIMED OUT

SYSTEM LOADING
[*******] COLD BOOT

Appl Date Time Setup
Util Bit (MAIN)

- After Pressing ON/OFF, the DTD Will Start a Built-In-Test (This Process Requires Approximately 1-2 Minutes)
- Press ABORT to Exit the Key Test. This Prevents Key Pad Lock Out Following the Cold Boot.
- Upon Completion of the Cold Boot, the DTD Will Display the Main Menu

All Administrative DTD Functions Will Be Performed From This Screen by the EKMS Manager Using the Supervisor CIK

CIK INITIALIZATION

- The Next Step in the Initialization Process is the Creation of a Supervisor CIK (CIK Default at the Factory is Set to Supervisor Mode)

- The Supervisor CIK is Created First to Allow the EKMS Manager to Control COMSEC Management Tools and Supervisor Functions Not Accessible Through User CIKs

- Following Creation of the Supervisor CIK, Up to 7 User CIKs Can Be Created

- Only a Blank CIK Can Be Initialized.

CIK INITIALIZATION

- **Only a Blank CIK Can Be Initialized. The DTD Checks Each CIK During the Initialization Process and Will Provide One of the Following Error Messages If the CIK Contains Key (LKEK)**

CIK Not Empty Failure

Press [CLR]

Overwrite Failed

Press [CLR]

- **A CIK May Be Erased by Placing It Into the DTD and Performing the "Zeroize" Function or by Erasing the CIK Under the "Setup" Functions of the Main Menu.**

CIK INITIALIZATION

- **There are Two Ways to Clean A CIK :**

  (1) Zeroize the DTD With the CIK Inserted. This Cleans the CIK, But Also Zeroizes the COMSEC Database, Destroys all Key in the DTD, Makes all Other CIKS Associated With That DTD Useless, and Results in the DTD Requiring Re-initialization.

  (2) Delete (Erasing) an Individual CIK Without Impacting the COMSEC Database or Other CIKS Associated With the DTD. This Process is Accomplished From the Setup Function of The DTD. The Drawback to This Capability is That Although it Works Every Time With a Supervisor CIK, it Does Not Always Work With a User CIK.

CIK INITIALIZATION

CIK STATUS / ERASURE

To check CIK Status:

- From the DTD MAIN MENU, Select Setup and Press ENTR

```
Appl    Date    Time    Setup
Util    Bit             (MAIN)
```

- Select Home_Addr and Press ENTR

```
Home_Addr    Serial#    Batt
More…    Keypad    {SETUP}
```

- Select Display Address and Press ENTR

```
Display Address
Change Address
```

- Press Page Down (H key) and the Following Screen Will Appear:

```
MSC C4S CORE VAB
370006
```

CIK INITIALIZATION

CIK STATUS / ERASURE

```
CIK Indx:  1        SN:  652401
CT:  2              [VALID]  [SUPR]
```

Serial number of the CIK

CIK Type (Supervisor or User)

Number of Times the CIK Has Been Inserted and Used

VALID: CIK for This DTD

NULL: CIK From Another DTD

- Press Page Down (H Key) to Check the CIK Slots

```
DTD Slot:  1        SN:  652401
CT:  2              [VALID]  [SUPR]
```

- If Nothing Is Assigned to a Specific Slot, the Following Screen Will Appear:

```
DTD Slot:  2      Empty
```

CIK INITIALIZATION

CIK STATUS / ERASURE

```
CIK Indx:  1        SN:  652401
CT:  2            [VALID]  [SUPR]
```

- At the Status Screen, Press **DELE** (D Key)

```
Erase CIK?
No     Yes
```

- Select **YES** and Press **ENTR**

```
CIK Erase Successful
Press [CLR]
```

- Press the **CLR** Key

```
Slot 1 Erase Successful
Press [CLR]
```

- Press the **CLR** Key

CIK INITIALIZATION

Home_Addr Serial# Batt
More… Keypad {SETUP}

- Select More and Press ENTR

Auto_Off Def_CIK Program
Comm-Mode Light Files

- Select Def_CIK and Press ENTR

Display Default CIK
Change Default CIK

- Select Display Default CIK to Display the Current CIK Type Or, Select Change Default CIK to Change the Current CIK

CIK Mode: Supervisor
Press [CLR]

OR

Select new CIK Mode:
Supervisor User

DTD CRYPTO IGNITION KEY (CIK)

- Default CIK Set to “Supervisor” at Factory
- DTD Creates “Supervisor” and “User” CIKs (8 Associated CIKs per DTD)
- Supervisor CIK Sets Any DTD Supervisor Function

- Custodian Creates Serial Number
  - → CIK Serial Number = Last 4 Digits of the DTD Serial Plus 01/02 for Supervisor CIK; 03-08 for User CIK
- EKMS Manager Determines the CIK Slot
- Allows Operator Access to Resident Key
- May Be Loaded By the LMD/KP (LDCIK Function)

SUPERVISOR/USER CIK CAPABILITIES

DTD FUNCTION	SUPVR CIK	USER CIK	NO CIK
Automatic Shutoff Time	✓	✓	✓
Automatic Light Shutoff	✓	✓	✓
Serial Number Display	✓	✓	✓
Serial Number Entry	✓		
Home Address Display or Entry	✓	✓	✓
Erase CIK	✓	✓	
Erase DTD Split Slot	✓	✓	
Battery Date/Time Display or Entry	✓	✓	✓
Setup Keypad	✓	✓	✓
Default Application Program Entry	✓		
Communications Mode Display\ Entry	✓	✓	✓
Default CIK Type Display	✓	✓	✓
Default CIK Type Change	✓		
Drive D Files Display	✓	✓	✓
Audit Upload, View, Reset or Remote	✓		
Program/Data Load	✓ (Valid SUPR)		
Date Display	✓	✓	✓
Date Update	✓		
Time Display	✓	✓	✓
Time Update	✓		
Format Drives	✓		
CIK Utility Function	✓ (Empty CIK)		
Check Database	✓	✓	✓
Revision Number Display	✓	✓	✓
Erase Program	✓		
Clone	✓ (Valid SUPR)		
Upload Host Operating System	✓ (Valid SUPR)		
Built-In Test	✓	✓	✓
Zeroize	✓	✓	✓
Fill Application	✓ (Valid SUPR)	✓ (Valid USER)	

CIK INITIALIZATION

- From the DTD MAIN MENU, Select Util and Press ENTR

Appl	Date	Time	Setup
Util	Bit		(MAIN)

- From the UTILITIES MENU, Select clk and Press ENTR

Audit	Load	Erase	Format
clk	Ckdat	Revno	More...

To Initialize the CIK:

- From the CIK Menu, Select Itcik and Press ENTR

Itcik	Ldcik	
		{CIK}

The Following Screens Will Then Appear:

CIK INITIALIZATION

Enter CIK Serial Number

123401

- Enter the CIK Serial Number (SN) and Press ENTR. The CIK SN Is Composed of the Last 4 Digits of the DTD SN (I.e, 561234), Followed By “01” for the EKMS Manager’s CIK, “02” for the “Supervisor” CIK, or “03-08” for User CIKs

Enter CIK Index [1..8]

1

- The Index Number Will Be the Same As the Last Number You Used to Form the CIK SN. For Example, the EKMS Manager”s CIK Index Would Be “1”. Press ENTR

CIK INITIALIZATION

Please Stand-By

Tap [ENTR] repeatedly

Until requested to stop

- Press the ENTR Key Repeatedly (Approximately 32 Times). This Action Generates a Local Encryption Key (LKEK) Within the DTD.
- When Directed, Stop Pressing ENTR.

Stop pressing [ENTR]

Please stand by

CIK INITIALIZATION

- When the LKEK Is Created, Half Is Applied to the CIK and the Other Half Is Applied to the CIK Index Slot You Assigned.

```
Operation Successful

Press [CLR]
```

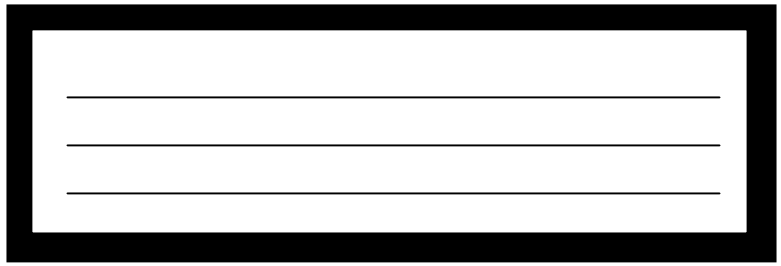
- If the Operation Was Successful, Press CLR. The Screen Will Revert to the CIK Menu.

```
Itcik          Ldcik
                        (CIK)
```

- Press ABORT and the DTD Will Return to the Main Menu.

```
Appl    Date    Time    Setup
Util    Bit             (MAIN)
```

CIK TAGGING



- **After CIK Initialization, Policy Requires That the CIK Must Be Appropriately Tagged With the Following Information:**

  - **CLASSIFICATION: Unclassified, Confidential, Secret, Top Secret. Determined by the Highest Level of Unencrypted Key That Can Be Provided From the DTD**

  - **The Serial Number Assigned to That CIK**

CIK INITIALIZATION

- **Additional CIKS (a Total of 2 Supervisor and 6 User) Can Be Produced and Serialized As Required Using the Same Procedures As Previously Provided.**

- **DTD Operators <u>Must</u> Ensure That Each Time a CIK Is Generated, the DTD Is Shut Down With That CIK Inserted.**

- **The CIK Type Must Match the DTD Mode. When Initializing or Using a User CIK, the DTD Must Be Set to the User Default. Equally, When Using a Supervisor CIK, the DTD Must Be Set to Supervisor Default. CIK Default Can Be Viewed/changed by Selecting Setup From the Main Menu. The Following Screens Will Appear:**

DTD INITIALIZATION

SETTING THE DATE

- **Requires Supervisor CIK.**
- **The Date Set by the EKMS Manager Will Be Used to Record Information in the DTD Audit Trail.**
- **From the Main Menu, Select Date.**

Appl	Date	Time	Setup
Util	Bit		(MAIN)

- **If the Information Displayed Is Correct, Press ENTR**
- **If the Information Is Incorrect, Enter the New Information in the Format Displayed.**

Date is Friday 07-02-1999

New mm-dd-yy:

DTD INITIALIZATION

SETTING THE TIME

- **Requires Supervisor CIK.**
- **The Time Set by the EKMS Manager Will Be Used to Record Information in the DTD Audit Trail.**
- **From the Main Menu, Select Time.**

Appl	Date	Time	Setup
Util	Bit		(MAIN)

- **If the Information Displayed Is Correct, Press ENTR**
- **If the Information Is Incorrect, Enter the New Information in the Format Displayed.**

Time is 21:00:00

New hh:mm:ss

- **Time Should Be Set to ZULU to Coincide With Crypto Changeovers**

Next show