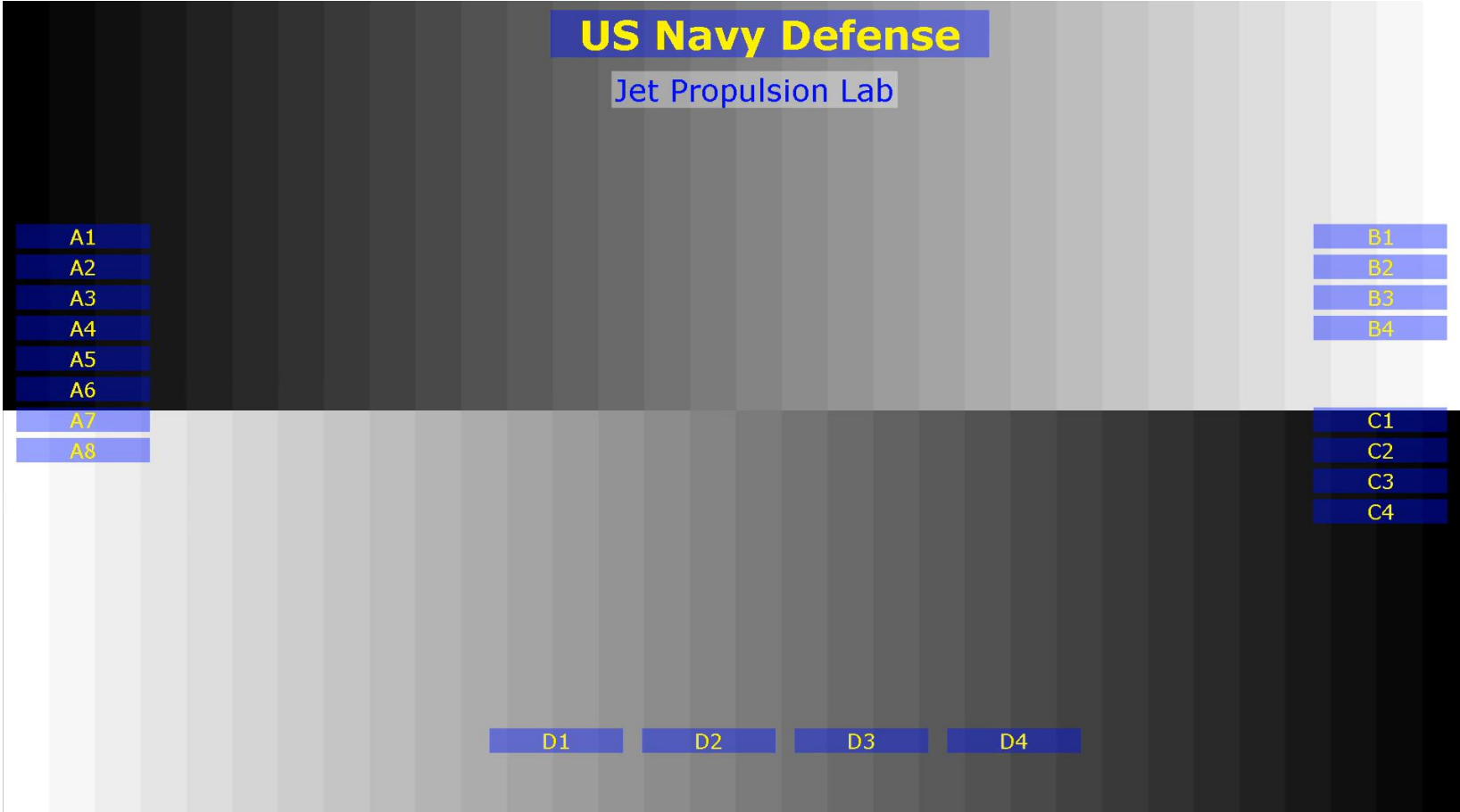
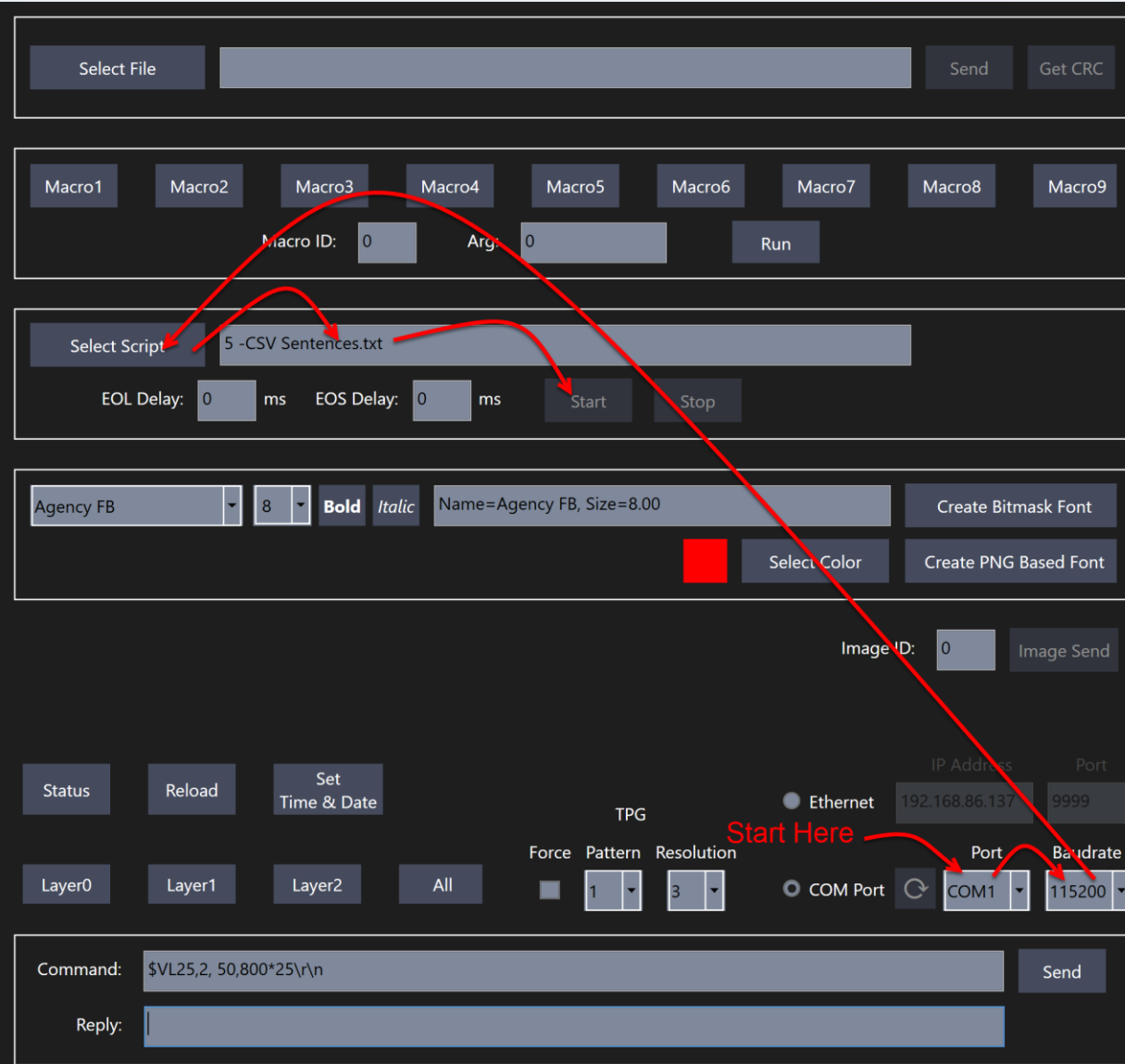
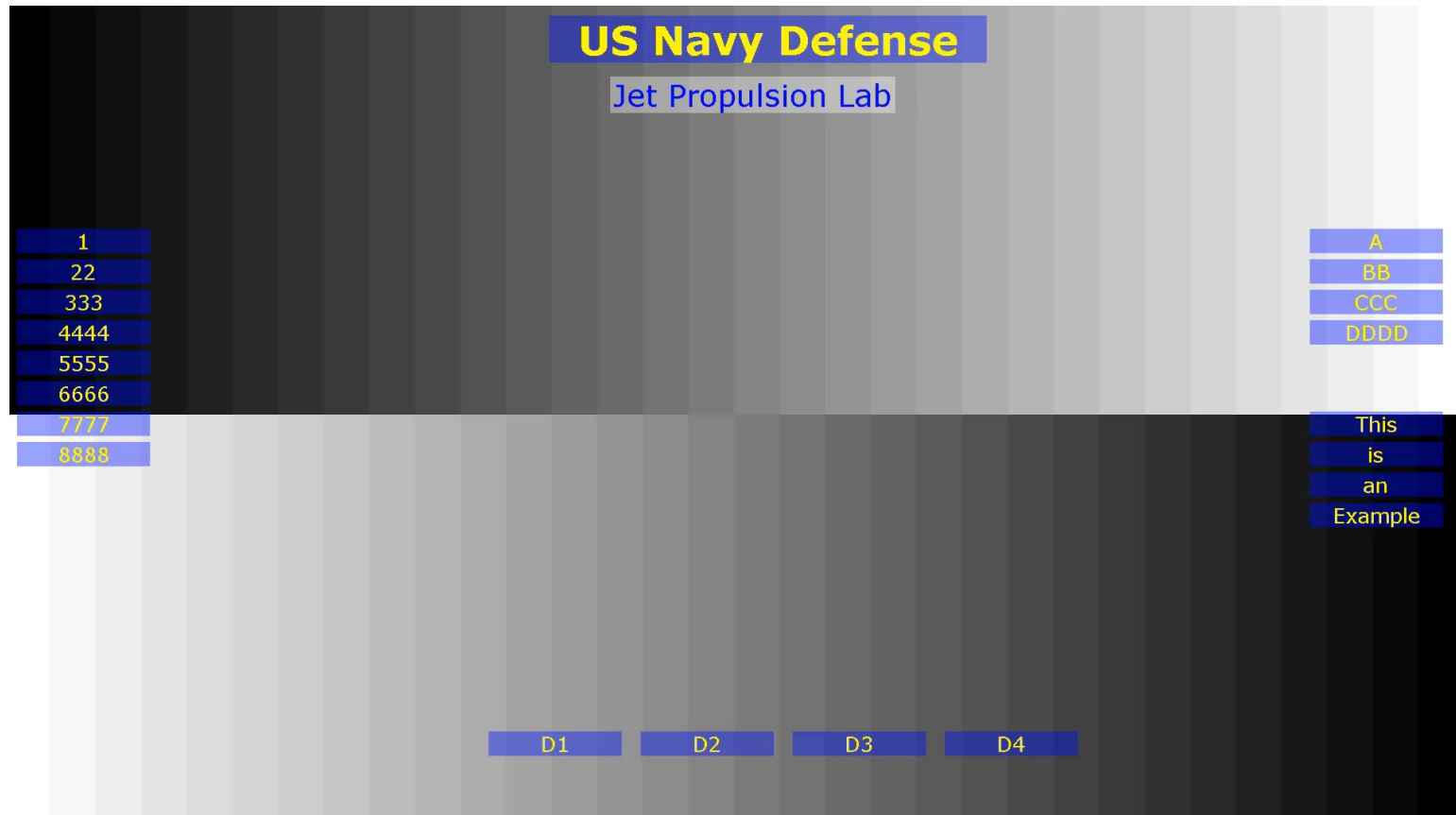


Step	Description
1	<ol style="list-style-type: none"> <li>1. Connect Proteus to a monitor &amp; apply power.</li> <li>2. Attach a keyboard to Proteus</li> <li>3. Press F9</li> <li>4. Select "Config:Load" &amp; Press Enter</li> <li>5. Select "<b>CSV</b>" and press Enter</li> </ol>
2	<p>Confirm the following screen appears on your monitor.</p> 

3	Start ProteusApp
4	Connect Proteus <b>mini-USB</b> (located in front panel) to your PC
5	<p>Configure ProteusApp (load file "<b>5 -CSV Sentences.txt</b>") as shown below.  <i>Note, your PC may enumerate to some other COM port i.e., COM6.</i></p>  <p>The screenshot shows the ProteusApp interface with the following configuration steps indicated by red arrows:</p> <ul style="list-style-type: none"> <li><b>Select File:</b> The file path "5 -CSV Sentences.txt" is entered in the text field.</li> <li><b>Macro ID:</b> The value "0" is entered in the field.</li> <li><b>Arg:</b> The value "0" is entered in the field.</li> <li><b>Start:</b> The "Start" button is highlighted.</li> <li><b>COM Port:</b> The "COM Port" dropdown menu is set to "COM1".</li> </ul>

After pressing “Start” in step 5, the text fields should be updated as shown below:

6

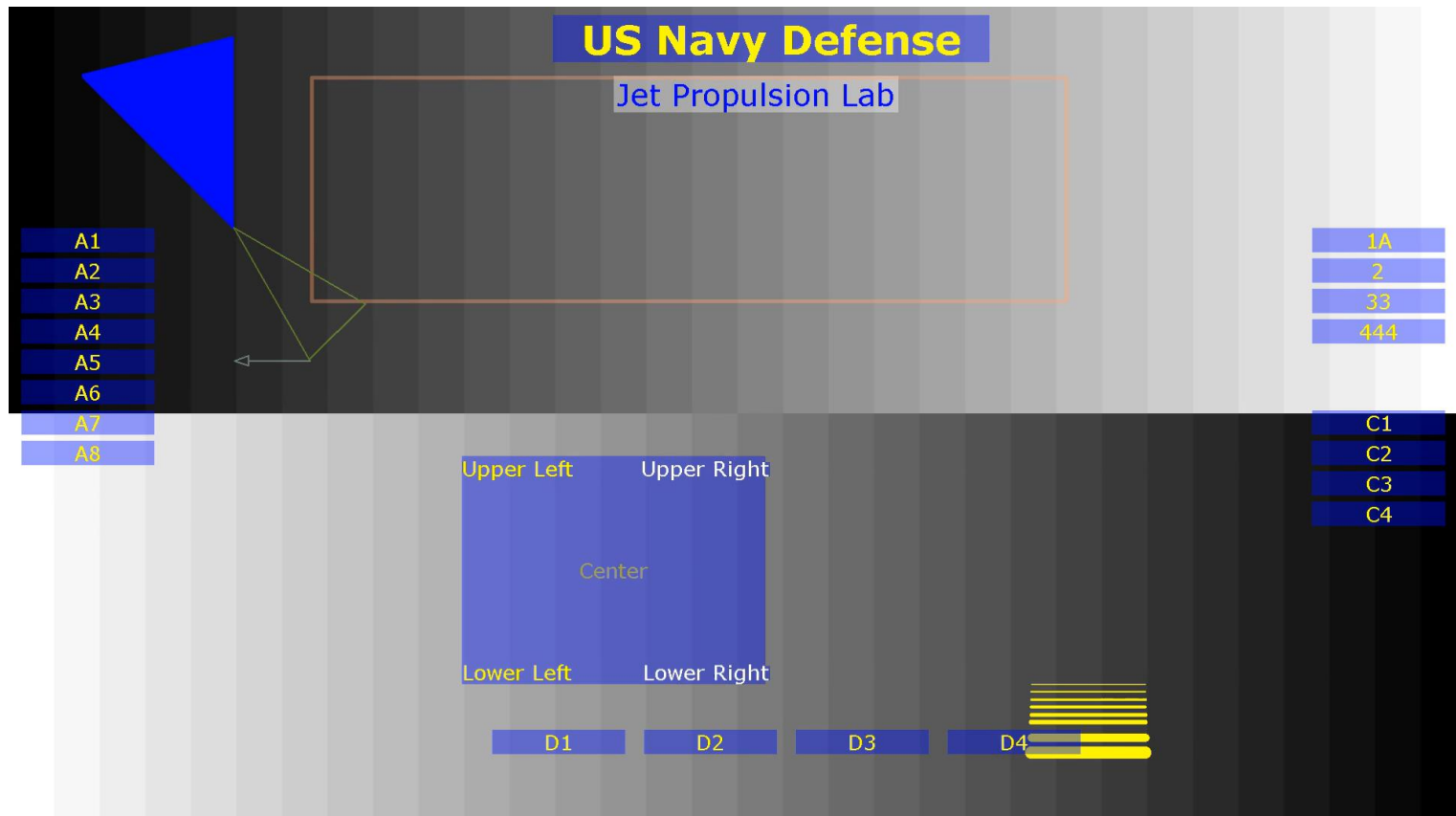


7

1. On ProteuApp, click “Select Script”
2. Browse and select file “**4 -TestCommands.txt**”
3. Press “Start”

After pressing “Start” in step 7, the following graphics should appear on your monitor:

8



9

1. Press ESC. Confirm text fields show default values as shown in step 2
2. Disconnect USB cable
3. **Connect** Proteus COM port (located in rear panel) to your PC via RS232 cable (*you may need a USB-RS232 dongle*)

10

Repeat steps 5 through 8

11

If you would like to test **Ethernet port**, continue with steps 12 & 13 below

12

1. Press F9, select “Edit: COM Port Setting” and press Enter
2. Set “IP Address Type” to Static or DHCP.
3. Press F10 to exit. Press ESC.
4. On ProteusApp, click select “Ethernet” Radio button.
5. Enter Proteus IP address. FYI, press Alt-H to see the assigned IP address.

13

Repeat steps 5 through 8 (*Please skip COM port selection & baud rate setting in the step 5 since we are using Ethernet port*)

## Command Processing used in this tutorial.

Commands present in both script files do not have checksum. Prior to transmission to Proteus system, **ProteusApp** appends the checksum (\* + **Checksum** + **CR** + **LF**) to each command.

Preparing commands for transmission	
Command Read	\$SentenceA,1,22,333,4444,5555,6666,7777,8888,9999,1234,5678,1122 \$SentenceB,A,BB,CCC,DDDD,EEEE,FFFF,GGG,KKK \$SentenceC,This,is,an,Example,55,66,777,888
Command Sent	\$SentenceA,1,22,333,4444,5555,6666,7777,8888,9999,1234,5678,1122*6A <sup>c<sub>R</sub></sup> <sup>L<sub>F</sub></sup> \$SentenceB,A,BB,CCC,DDDD,EEEE,FFFF,GGG,KKK*6D <sup>c<sub>R</sub></sup> <sup>L<sub>F</sub></sup> \$SentenceC,This,is,an,Example,55,66,777,888*16 <sup>c<sub>R</sub></sup> <sup>L<sub>F</sub></sup>

### Alternative Checksum

If you are developing your own program to sent commands to Proteus, it is good practice to bypass the checksum by using **XX** as shown below:

\$SentenceA,1,22,333,4444,5555,6666,7777,8888,9999,1234,5678,1122\*XX<sup>c<sub>R</sub></sup> <sup>L<sub>F</sub></sup>

\$SentenceB,A,BB,CCC,DDDD,EEEE,FFFF,GGG,KKK\*XX<sup>c<sub>R</sub></sup> <sup>L<sub>F</sub></sup>

\$SentenceC,This,is,an,Example,55,66,777,888\*XX<sup>c<sub>R</sub></sup> <sup>L<sub>F</sub></sup>

After successful communication, replace **XX** with the actual checksum described in the SCS (Software Communication Spec.).

Proteus RS232 can be configured for various baud rates: 4800, 9600, 19200, 38400, 57600, 115200, 230400, 460800.

Always ensure your system can generate accurate baud rate. If unsure, start with a low baud rate and gradually increase.