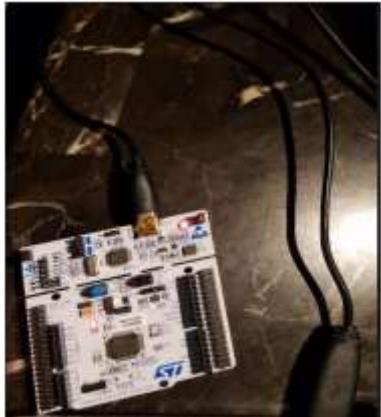| TNC Testing Form (REV1)	
Leaf on the Tree	Packet Construction
Device Under Test (Testing Tree Number):	2.2.2.1
Date:	11/1/20
Person(s) Conducting Experiment:	Kobe Keopraseuth
Signature:	
Experiment Purpose:	The purpose of this experiment is to validate that the microcontroller will output the AX.25 (excluding the flags) in correct order.
Experiment Procedure:	I will display how the AX.25 packet will be sent to the radio, using a serial monitor.
Equipment Settings / Software Settings (w Revision):	We will be using Rizwan's software to send a KISS packet over UART, and we will be using visual studio's serial monitor to display the AX.25 packet's bit sequence.
Testing Diagram / Picture:	
Data Points:	**Bitnary Bit stream of packet**

```
Start flag       = 1  1  0  0  0  0  0  0
Address Field 1  = 1  0  0  0  1  0  0  0
Address Field 2  = 1  0  0  0  0  1  0
Address Field 3  = 1  0  1  0  1  1  0  0
Address Field 4  = 1  0  0  1  0  0  1  0
Address Field 5  = 1  0  0  0  1  0  0  0
Address Field 6  = 0  1  0  0  0  0  0  0
Address Field 7  = 1  1  1  0  0  0  1  0
Address Field 8  = 1  0  0  1  0  1  1  0
Address Field 9  = 1  0  0  1  1  1  1  0
Address Field 10 = 1  0  0  0  0  1  0  0
Address Field 11 = 1  0  0  0  1  0  1  0
Address Field 12 = 0  1  0  0  0  0  0  0
Address Field 13 = 0  1  0  0  0  0  0  0
Address Field 14 = 0  1  1  0  0  1  0  1
Control Field    = 0  0  0  0  0  0  1  1
PID Field        = 1  1  1  1  0  0  0  0
Info Field 1     = 0  1  1  1  1  1  1  0
Info Field 2     = 0  1  1  1  1  1  1  0
Info Field 3     = 0  1  1  1  1  1  1  0
Info Field 4     = 0  1  1  1  1  1  1  0
Stop flag        = 1  1  0  0  0  0  0  0
```

| | ```
Printing AX25_PACKET being sent to radio
Address Field 1 = 1  0  1  0  0  1  1  0
Address Field 2 = 0  0  0  0  0  0  1  0
Address Field 3 = 0  0  0  0  0  0  1  0
Address Field 4 = 0  1  0  1  0  0  0  1
Address Field 5 = 0  0  1  0  0  0  0  1
Address Field 6 = 0  1  1  1  1  0  0  1
Address Field 7 = 0  1  1  0  1  0  0  1
Address Field 8 = 0  1  0  0  0  1  1  1
Address Field 9 = 0  0  0  0  0  0  1  0
Address Field 10 = 0  0  0  1  0  0  0  1
Address Field 11 = 0  1  0  0  1  0  0  1
Address Field 12 = 0  0  1  1  0  1  0  1
Address Field 13 = 0  1  0  0  0  0  0  1
Address Field 14 = 0  0  0  1  0  0  0  1
Address Field extra =
Control Field   = 1  1  0  0  0  0  0  0
PID Field       = 0  0  0  0  1  1  1  1
Info Field =  0  1  1  1  1  1  0  1  0  0  1  1  1  1  1  0  1  0  0  1  1  1  1  1  0  1  0  0  1  1  1  1  1  0  1  0
FCS Field     = 1  1  1  1  1  0  0  1  1  0  1  0  0  0  0  0  0
``` |
	Binary Bitstream of how AX.25 packet will be sent to radio
Pass / Fail:	Pass
Interpreted Notes:	As shown on the serial monitor, the AX.25's bits are in the correct order. FCS field is sent MSB first and other fields are sent LSB first. After 5 contiguous ones then a bit stuffed zero is added after.
Recommendations for Modifications:	None