Special configuration, planned and set up by GSFC's Bill Fink and Paul Lang on February 1, 2006, to conduct initial user testing of NREN's new 10-GigE lambda (NLR-SUNN-WASH-10GE-92) on the NLR between Sunnyvale and McLean. The special configuration required NLR NOC engineers to enable a client side soft loop on the cisco 15454 at Sunnyvale. Fink and Lang then conducted nuttcp network performance testing across the McLean to Sunnyvale NLR path, which was then looped back to McLean, using the special configuration.

```
                      +-------------------+
                      |    | TX | RX |    |
                      |    +---------+    |
                      |      |     |      |
                      |      +-----+      | Sunnyvale
                      |     Soft-Loop     |
                      |                   |
                      |    cisco 15454    |
                      +-------------------+
                               | |
                               | |
                               | |
                            ---------
                           /         \
                          |    NLR    |
                           \         /
                            ---------
                               | |
                               | |
                               | |
                      +-------------------+
                      |    cisco 15454    | McLean
                      +-------------------+
                               | |
                               | |
                               | |
                      +--------+ +--------+
                      |                   |
                      |     +-------+     |
                      |     |       |     |
                +-----------------------------------+ McLean
                |    | TX | RX |   | TX | RX |    |
                |    +---------+   +---------+    |
chance4===|      VLAN 88       VLAN 89      |===chance5
VLAN 88   |      untagged      untagged     |   VLAN 89
untagged  |                                 |   untagged
```

```
           |          Force10 E300           |
           +---------------------------------+
                          | |
                          | | tagged VLANS 88,89
                          | |
                       ---------
                      /         \
                     |  DRAGON   |
                      \         /
                       ---------
                          | |
                          | | tagged VLANS 88,89
                          | |
           +---------------------------------+ GSFC
           |                                 |
           |                                 |
chance====|          Force10 E600           |===chance2
VLAN 88    |                                 |   VLAN 89
untagged   |                                 |   untagged
           +---------------------------------+
```