

STANDARDS CHANGES CATALOG (SCC)

SCC NUMBER: SCC#126

CHANGE PROPOSAL TITLE: MIL-STD-2045-47001C port numbers clarification for IP datagram exchanges.

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ORIGINATOR'S INTERNAL NUMBER:

AFFECTED DOCUMENT: MIL-STD-2045-47001C

PRECEDENCE:

RECOMMENDATIONS:

RECORD OF PROCESSING

<u>DATE:</u>	<u>ACTION:</u>
15 May 02	Proposal
15 May 02	Work Item-R0
13 June 02	R1
24 Sep 02	Draft
24 Sep 02	Approved

1. STATEMENT OF THE PROBLEM: The meaning of port numbers, especially the source port number, for data exchanges was unclear in revision "B" of this standard. For example, a recent SCC #124 clarified the port numbers for Segmentation and Reassembly (S/R) data exchanges using the "47001" Application Layer Protocol (ALP) header. The confusion lies with the meaning of port numbers as "points". Specifically, when an User Datagram Protocol/Internet Protocol (UDP/IP) datagram carries an S/R segment the UDP destination port number (1624) should point to the S/R sub-transport layer, whereas the S/R destination port number should point to the ALP or 1581. On the other hand, if an S/R segment were absent, then the UDP destination port number should point to 1581; that is the "47001" ALP. Moreover, for data exchanges using the "47001" ALP the source port number can be any legitimate value but the destination port number is governed by what the UDP or the S/R segment points to; that is the destination port numbers are either 1624 and/or 1581 for "47001" data exchanges.
2. PROBLEM ANALYSIS: This SCC will extend changes made to the standard as stated in SCC #124. SCC #124 dealt with S/R segments whereas this SCC will deal with non-S/R data exchanges using the IP/UDP/"47001" header. It will modify paragraph 5.8.3.7 in the standard. Note that this modification will change the write-up of this paragraph in SCC #124.
3. PROPOSED SOLUTION:

5.8.3.7 Destination port number.

The destination port named "mil-2045-47001" has been registered with the Internet Assigned Number Authority and has been assigned port number 1581 (decimal) to indicate the MIL-STD-2045-47001 ALP as defined by this standard. This "mil-2045-47001" port shall be passed as the destination port parameter to the lower layer protocol (e.g., UDP, TCP, or S/R) when exchanging UMF defined in TABLE IV. Table HH shows the port numbers that shall be used for IP/UDP data exchanges using the "47001" ALP. ~~(See C.3.3.1 for a discussion on exchanging IP datagrams data using the S/R protocol)~~. If n-layer pass through is invoked without S/R, the next lower layer is the Intranet layer and destination port number is not required.

Table HH Port Numbers for PDUs related to the exchange of 47001 ALP

<u>“47001” messages sent via UDP/IP</u>	
<u>UDP Destination Port Number</u>	<u>UDP Source Port Number</u>
<u>1581</u>	<u>Any Value</u>

4. ALTERNATIVE SOLUTIONS: None.
5. SYSTEM CHANGES REQUIRED: None.
6. CONFIGURATION ITEM DOCUMENTATION CHANGES: None.
7. IMPACT ON INTEROPERABILITY: Not known.
8. IMPACT ON RELATED DOCUMENTS: MIL-STD-2045-47001C
9. IMPLEMENTATION DATES: TBD.
10. OTHER CONSIDERATIONS: None.
11. REFERENCES: None.
12. Trouble Reports (TRs) ADDRESSED IN THIS SCC: None.