Memorandum

To: Louis A. Waters, U.S. Coast Guard Auxiliary  
From: Maury York, Assistant Director for Special Collections  
Subject: Preservation of Electronic Publications and Records  
Date: February 15, 2010

Recently, members of the U.S. Coast Guard Auxiliary asked whether the Special Collections Department of the J. Y. Joyner Library can maintain electronic versions of publications and records produced by the USCGA. Unfortunately, we cannot.

There are a number of reasons for this. Digital formats are less stable than physical ones. For example, CDs have a useful life of about ten years; acid-free papers last exponentially longer. Digital formats are subject to greater rates of obsolescence. Standards like .doc and .pdf change frequently, which means that if documents are to be useful in the future, we would have to migrate all the files to newer versions. Digital formats are far more fragile than paper ones. A loss of even one bit (out of the billions of bits that may make up a file) can render the entire thing unreadable. Compare this to tearing off the corner of a paper file – this loss does not affect the readability of the rest of the document. Digital files are no more accessible than paper ones if the digital files are not searchable. To make them searchable, we would have to build a database and repository to provide access to them. Otherwise, they will languish on servers. One of the best methods of preservation for digital files is to make copies and store them at multiple locations. Thus, for every one digital file we are sent, we would need to make four or more copies. Then we would need to build a systematic way to track where the copies are and ensure that each instance is not corrupted over time. When the format needs to be migrated, we would again need to make another four or more copies. Unfortunately, we simply do not have the staff resources or server space to undertake work of this magnitude.