A-2. Introduction

1.0 Background

The current effort to develop a common River Forecast Center (RFC) archive database grew out of discussions started at the Hydrology Science Conference held in August 2000. The project was selected by Regional Hydrologic Service Divisions (HSD) and RFCs as one of the top priority issues for the newly created RFC Development Manager (RDM). As part of the RDM process, a 3-phase process was defined to accomplish this project. The three phases of this project are: (1) design, (2) implementation and (3) operational maintenance of an RFC Archive Database/Files System. The phase one team completed its part of the project the fall of 2001 and their findings are reported in the *"Final RFC Archive Database/Files System Design"* document dated November 30, 2001. In the late fall of 2001 the RDM formed the phase two team. The phase two team used the aforementioned design document as its guide for the design of the database, file system, and associated applications for the version 1 RFC Archive Database/Files System. Since the fall of 2002, the RAXUM Team has been in place. This team, in coordination with OHD/HL, has been responsible with all bug fixes and upgrades of the RAX.

2.0 Purpose

As stated in the Requirements Document, this Archive Database/Files System will store "data" (observations and model information) that will enable the River Forecast Centers to perform the following:

- verification
- studies to improve current and future products
- calibration activities
- channel routing development
- unit graph development
- case studies
- operational forecast assistance
- applied research

- customer inquiry support.

Many of these applications will require additional development (beyond the scope of this project) on either the local or national level.

The Archive Database/Files System will allow data to easily be accessible and transportable across the AWIPS and office LAN environment. In addition, the Archive Database/Files System will give the RFCs a common environment, which will be conducive to sharing of information. The system will accommodate the varying needs of each RFC, and be expandable and up-gradable. It will have a backup procedure and disaster recovery process, as well as a change management procedure, to accommodate future needs.