"Houston, we have a problem . . .": Designing a Digital Preservation System for a NASA Center for Advanced Life Support

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Abstract: This poster describes a collaborative effort between the Purdue University Libraries and the Advanced Life Support—NASA Specialized Center of Research and Training (ALS-NSCORT) center to design and implement a system to preserve a digital collection of published papers, reports, documents, data and other materials, using the library's institutional repository.

ALS-NSCORT is a multi-university, inter-disciplinary research center whose purpose is to explore and develop ways of supporting long-term human habitation in outer space. Although they unexpectedly lost their funding in 2007, the center administrators believe that their work has current and lasting value, and that they will be able to secure funding to continue their work in the future.

In designing a digital preservation system to house the ALS-NSCORT collection, the libraries encountered many questions and challenges. This poster will highlight these challenges and the decisions made to address them. The challenges included: identifying the preservation needs and requirements of ALS-NSCORT for their collection, working with a diverse set of materials, modifying the existing institutional repository to accommodate the collection, incorporating "active" research materials, selecting a metadata schema and a preservation format, and addressing the lack of copyright over published articles.

In addition to a digital repository, the collaboration will serve as a model for designing digital preservation systems for other research centers at Purdue and elsewhere. This model will be used to reach out to other centers as an example of how the libraries can identify specific needs and requirements, and then design systems to meet these needs.

About the authors:

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