

PDR RID Report

Originator Hughes, Peter **Phone No** 301.286.3120
Organization GSFC Code 522
E Mail Address phughes@kong.gsfc.nasa.gov
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Review	FOS	
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Section N/A **Page** N/A **Figure Table** N/A

Category Name Design **Actionee** HAIS
Sub Category
Subject Lack of Decision Support Systems and Advanced Automation

Description of Problem or Suggestion:

There was no mention of the use of automation in the role of a decision support system. Has this effort been terminated? Will the FOT have any power tools to allow them to increase the level of FDIR automation (whether through rule based systems or other methods)? Are you still considering the use of expert systems to augment real-time analysis of the spacecraft and operations? Are there other software elements in the FOC that can monitor s/c mnemonics and perform *validated* actions (e.g. issue *validated* command directives or execute procedures) to correct identified problems?

Originator's Recommendation

Don't forgo the use of expert systems which may allow increased levels of automation as desired. Identify tools that are straightforward enough to use by the FOT.

GSFC Response by: **GSFC Response Date**

HAIS Response by: D. Herring **HAIS Schedule** 1/6/95

HAIS R. E. J. Kuntz **HAIS Response Date** 1/6/95

The FOS development team is currently evaluating the potential use of expert systems within the FOS. The current prototyping effort is in fact undertaking such a task. A prototype is being developed for Solid State Recorder (SSR) monitoring, which will use spacecraft telemetry, NCC, and EDOS data to determine SSR status and feed the results to the scheduling system. In the event of SSR playback anomalies, the Decision Support System (DSS) will provide recommended recovery actions to the FOT. The prototype will not only demonstrate the potential use of expert system technology, but will also demonstrate how the technology could be integrated into the total FOS system. The current status of the ongoing prototype will be presented at the Prototype Results Review (PRR) in February. Results from the PRR will help determine the final design of the decision support tool.

Status Closed **Date Closed** 2/1/95 **Sponsor** Johns

***** Attachment if any *****