

Presentation to CENDI Group: The NASA Thesaurus as an On-Line Tool

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- I. Introduction/opening remarks
 - a) The NASA Thesaurus; what is it
 - b) On-going development to support present NASA research initiatives, including research in biological sciences, geologic studies, and other areas reflective to the Mars and other planetary missions.
 - c) Continued development of terms in the aerospace/aeronautics subject areas.
 - d) Thesaurus development as a team effort.

- II. The on-line NASA Thesaurus and Related Products:
 - a) NASA Thesaurus
 - i. Accessible: <http://www.sti.nasa.gov/STI-public-homepage.html>
 - ii. Searchable using hyperlinks and Adobe functionality
 - iii. Benefits
 1. Allows users to identify terms in a report.
 2. Monthly updates are provided.
 3. Utilize thesaurus terms in on-going searches.
 - b) Related products:
 - i. Aerospace Science and Technology Dictionary
 - ii. Aerospell Supplemental Spell Check file
 - iii. NASA Thesaurus Terms Added (Monthly Update)
 - iv. NASA Scope and Subject Category Guide

- III. Machine Aided Indexing
 - a) Description:
 - i. Tool currently used at CASI to provide indexers with suggested indexing terms based on abstract and title.
 - ii. Spell-check of the abstract and title.
 - iii. The knowledge base is continually being updated as indexers encounter new terms in reports, journal articles, etc.
 - b) Features:
 - i. Linked to the NASA Thesaurus to suggest indexing terms.
 - ii. An application is available at each indexers desktop for potential daily updates so that several individuals are contributing to the updates.

Pros/cons:

- iii. MAI suggestions are intended to be suggestions only so that the indexer must exercise caution when choosing a suggested term.
- iv. It serves as an excellent starting point for indexing, particularly when an indexer is responsible for several areas of technology.
- v. Since MAI identifies words not found in the knowledge base, it serves as a source of new terms for the thesaurus.
- vi. As an online tool for NASA authors or other registered users, it suggests the indexing terms which would result from a report going to the NA&SD database.

IV. Current Activities:

- a) Integration of CASI lexical resources and term matching to subject categories as an aid to categorization.
- b) Currently make resources available online as products to support our customers (thesaurus products, monthly updates, subject category guide).
- c) Maintain authority files from individual staff PC's.
- d) Information received from external sources is pre-processed through programs to generate a file that contains information not matched. Staff then add translations to the file to map external information to the NASA Thesaurus terminology. Information may be loaded directly to NA&SD or routed for manual review if all field requirements are not satisfied.

V. Ontology/taxonomy Development:

- a) Brief mention of efforts underway at JPL. Suggest going to site <http://pub-lib.jpl.nasa.gov/pub-lib/dscgi/ds.py/View/Collection-10> which provides a good discussion on the project.