



**Beams-doc-925**  
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## **Notes on Transferring MI-Notes to the Beams Division Document Database**

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### **Abstract**

Using the [Beams Division Document Database](#) (DocDB) for storage, the [MAIN INJECTOR NOTES](#) Web Page has been re-implemented. Many inadequately stored documents have been located in various formats and stored in DocDB. In addition to web page you are now viewing, this Beams-doc-925 will store various files which describe/document this effort to assist anyone who seeks to further improve the quality of MI-Notes online.

### **Introduction**

The Beams Division has had a variety of notes systems which document various aspects of the complex and its operations. These systems have evolved in various ways since their introduction in the era when all documents were circulated as paper copies. In the fall of 2002, it was recognized that the work of the Main Injector Group was being impeded by the fact that their web system for documents was difficult to maintain and available new documents had not been added for a couple of years. A document database system which had evolved by use in several experimental groups was implemented to replace the MI-Notes web page system. This system was then made available to various groups and now is open for use across the Beams Division.

The Main Injector Group has maintained a formal note system since 1989. In the summer of 1998 and again one summer since then, summer help has scanned old documents and converted them to a machine readable form. The access to them has been provided via a web page ([MI Notes](#)). The system has not been successfully maintained for documents created since 1999. In parallel with implementation of the Beams Division Document Database, MI-Notes documents were transferred to the new system. This document will describe the efforts needed to achieve the present new implementation and store documents and spreadsheets which were created to record activities and document status of the effort.

### **Document Transfer**

## Winter 2002 through Spring 2003

Document numbers were reserved for MI-Notes by Bruce Brown and Ruth Becker (Main Injector Department Administrative Person), starting in November 2002. A spreadsheet was implemented to provide topics for Ruth to use and it has been maintained for various uses since.

MI\_Notes\_Transfer\_Audit\_Nov2003.xls is the current form of that spreadsheet and it is part of Beams-doc-925. Beams doc numbers were reserved for all notes on the existing MI-Notes pages plus some additional notes in Ruth Becker's lists by Jan 14, 2003. The process of transferring the documents then started. Many problems were discovered and processes begun to address them.

- The initial efforts to place the documents on the web involved conversion to html. In addition to problems with content, links had been added to the end of the documents to return the reader to the MI-Notes page or the Main Injector Department page. These had been hardcoded to a machine name which caused them to fail since that machine had been replaced.
- The process required to get the desired content, including embedded images, was complex. The software suggested for the process was not available to Ruth Becker so initial transfer of .html documents was carried out by Bruce Brown. Ruth transferred some .pdf files.
- Examination of the .html files demonstrated that many of the documents contained figures which had not been included in the .html conversion process. It was decided that if a more complete document existed in the available paper files, that copy would be re-scanned to create a suitable new version.
- In addition, the process of file conversion employed optical character recognition (OCR) which was adequate for understanding some document but failed dramatically for some (an especially dramatic failure is MI-Note-0017.html). Re-scanning was also selected to solve this problem.

Two lists were used for MI-Notes in addition to the web page. On a printed version of a computer file, Note numbers were assigned upon request by initially writing them onto the paper copy, then updating the file. The list of MI-Notes was also maintained through the years in a Microsoft Word file. Together, these were more complete than the web page. Ruth Becker updated this file and, with further revisions, it is also available as part of Beams-doc-925. In addition, a list of document troubles was created in ASCII (MI\_Notes\_Troubles.txt). This was updated through April 2003. Most issues and resolutions were transferred to the ProblemFixFall2003 worksheet of MI\_Notes\_Transfer\_Audit\_Nov2003.xls.

## Summer 2003

Monica Neuffer was employed for the summer to assist in completing this project. She filled a number of roles:

- A column for Beams-doc numbers was added to the spreadsheet and she obtained the document number for each MI-Note which had a reserved number in DocDB.
- Using the keywords column of the spreadsheet, she read documents and selected keywords from the then available lists (multiple, at the time) placing them in the keywords column of the spreadsheet, then adding them to documents in DocDB along with selection of additional Topic/Subtopic designations as was suggested by review of the document.
- Documents available online were reviewed and transferred as suitable.
- In the FileType column of the spreadsheet, she documented which files were available with types which could be more easily transferred. Some .pdf files were then transferred.
- Many documents were not available or were unsuitable as found. These were obtained from the paper file copies, scanned and converted to .html and transferred to the DocDB. Most of this was carried out using a system provided by the Fermilab Library. Since that system provided only black-and-white scanning, Beams-doc-343-v1 was scanned on a color scanner and converted.

About 70 documents were scanned and inserted including some of hundreds of pages.

- Bruce Brown and Monica Neuffer examined the complete list (.doc) of MI-Notes and sent e-mail reminders to authors or ask Ruth Becker to search for electronic copies on the Main Injector Administrative Assistant computer. When copies were provided (many were inserted into DocDB by the author), Monica inserted them into DocDB.
- Due to inadequate communication, Monica inserted some html documents without following all of the documented instructions and observing all the known concerns. [These were addressed in Fall 2003 as they were noted.]
- As .pdf documents were identified with minor corrections required, Bruce Brown used Adobe Acrobat to rotate pages, add in single re-scanned pages or make other useful changes to the files before insertion into DocDB.
- In the second week of August, a few entirely new MI-Notes were inserted into DocDB (through MI-0302). Bruce Brown then issued an e-mail declaring that MI-Notes were a closed set and that further documents on Main Injector or Recycler should be issued only as Beams Documents without any MI-Note designation.

### Fall 2003

Following the departure of Monica Neuffer, Ruth Dejerld was asked to assist in this task. The following tasks were carried out with her assistance:

- The completed MS Word list of MI-Notes (which started with Marion Richardson) [attached to Beams doc 925] was checked against the document database and a new version was created in which the titles were replaced (in Word) with Links. Bruce edited this file, added some text, removed the version part of the link to cause the link to access the newest version of each document, and created a new MI-Notes web page. After minor additional editing, this was installed on the Beams Documents menu as the [MI Notes](#) link. Minor further corrections have been made to the file MI\_Notes\_Webpage.doc before being stored in Beams-doc-925.
- Ruth Dejerld then audited each MI-Note on this list, entering the date in the Audit Date column of the MI Notes worksheet for satisfactory documents. A list was generated of the 46 problems observed (documents not entered at all, figures missing, missing formulas and the like). Of these Bruce Brown identifies 16 as ones which we cannot expect to improve (or perhaps consider good enough) and 2 of which the authors need to submit the documents. The list of issues and their resolution make up the first entries in the ProblemFixFall2003 worksheet in the spreadsheet.
- To address problems, a variety of actions were taken including locating equivalent documents which had been submitted as TM's and scanned by the library, located .doc versions (already submitted or not yet submitted) and convert to .pdf with Adobe Acrobat), or scan from paper copies (about 10 additional documents), or use the .html version from the existing MI-Notes website, address problems in html version by re-extracting it and resubmitting after any required editing. An ACSII file, Notes\_on\_DocDB\_archiving.txt, was maintained to document the various steps in saving/converting these documents.

These activities were the major effort documented in Bruce Brown's web pages of activities for Summer 2003 ( [MagneData 2003](#) and [Projects and Progress for Monica Neuffer](#)). Additional comments on the document database and its use are available as Beams-doc-553 and Beams-doc-919. A web page [Notes on Document Database Effort for Main Injector Group](#) was created early in the DocDB effort and it is also now available as a resource concerning these activities.