

HELP Annex to the Hydrologic Optics Paper

BACKGROUND

This CD-ROM contains a PDF version of R.W. Preisendorfer's Six Volume "Hydrologic Optics", first published in 1976. The original Hydrologic Optics typed manuscript was scanned into six large PDF files (ranging in size from 25Mb to almost 48Mb). Each page was an 'image' of the original manuscript and, therefore, could not be searched by word.

This CD contains a rework of the original PDF effort. To facilitate opening and searching the paper,

- the original 6-file-PDF effort was regrouped into 196 smaller "section-sized" files (each original "chapter" was further divided into "sections"). Each section was still an 'image' of the original manuscript, not having had Optical Character Recognition (OCR) performed (hence text could not be recognized as text, but rather as 'images'). To enable a text based index of the work, these smaller 'image' PDFs were then
- exported as JPG files,
- OCR'd, and
- a separate set of PDF files created.
- These new PDFs were indexed using Adobe Acrobat 'Catalog' function, and
- then the indexed PDF files were replaced with the original source PDF files.

Replacement with the originals was done because the OCR'd set could not accurately reflect the vast number of formulas present. (The OCR'd set is included on the CD in the folder 'Searchable PDFs', should you want to 'copy' text.).

TO BEGIN

Open the file **START.PDF** from the CD. From this PDF of the original first page, you are linked to various options for reading the paper. Note: a link labeled "<< Title Page >>" at the bottom of each PDF file returns you to this "Start" page. The options on the START/Title Page are:

- **Original Document**

This option allows you page sequentially through the original document. Hyperlinks appear on the last page of each section allowing you to open the next section in sequence ("Next Page >>"), go to the Table of Contents ("<< Table of Contents"), or return to the START page ("<< Title Page >>").

- **Table of Contents**

A new Table of Contents containing all 13 chapters and their sections, for all six volumes, with hyperlinked section titles (the blue section headings link you directly to each section).

- **Search by Keyword**

This hyperlink opens the Adobe Acrobat menu item “Edit... Search... Query”. Select “Indexes...” and ensure you are attached to the “Hydrologic Optics Paper” index and (preferably) no others. There is a short ‘search’ tutorial below. (NOTE: This is not to be confused with the simple ‘search’ feature that allows searching for a word or words in only the currently opened document. This “search by keyword” function searches across all indexed files for desired words and returns every matching file/chapter-section.) Because the OCR’d set was replaced by the original set, search results can only take you to the file/chapter-section in the query results, and not to the individual occurrences of the word(s) searched for.

- **Original Index**

This links to the original scanned PDF index for the entire six volumes. Because it is an ‘image’ only, there are no hyperlinks within the index to link you to the target you desire. You must access the section directly by noting the volume and page numbers listed in the index. See “file naming convention” below for an example of that process.

- **Help**

This file you are now reading.

- **Biography**

R.W. Preisendorfer’s biography.

FILE NAMING CONVENTION

The file names are constructed to identify the Volume number, Chapter number, a "dash," a paragraph number and then a "P" followed by the Beginning Page Number of that chapter. Example:

V2C4-09P66

This file name indicates Volume 2, Chapter 4, paragraph 09 beginning on page 66.

If, in the “Original Index” you look up “aerial stereo photography”, you will find it in “VI: 166”, meaning Volume VI (6), page 166. You would then open the file (in the folder “paper”) named “V6C12-07P166.pdf” to access that indexed term.

This file naming convention used allows all files in the entire document to appear in sequential order when sorted by “name”.

SPECIAL INSTRUCTIONS FOR PRINTING

Because the original scan-to-PDF effort saved the output at large page sizes (usually 24”x37” or 29”x46”), you may have to select “scale” or a similar “fit to page” print command to successfully print out these pages.

QUICK SEARCH TUTORIAL

- a. For a single term, type that term in the search box. [may use wildcard characters * and ?. * substitutes for zero/one/many characters; each ? substitutes for a single character.]
- b. For a simple boolean search, use '**and**', '**or**', or '**not**'
 - "refraction and color" returns only documents with both words
 - "refraction or color" returns documents with either word
 - "not refraction" returns documents without the word "refraction"[**'not'** only works singly, as in "not color". "Refraction not color" will result in a query failure. To overcome this limitation; search for "refraction", then 'refine' (see para. 'f' below) the search with "not color"]
- c. For a phrase, type in the phrase. To search for a phrase that includes any of the 3 reserved boolean search words **and**, **or**, or **not**, enclose the entire string in quotes.
- d. Punctuation (other than the apostrophe) or special characters (such as "@" and "-") are ignored
- e. Use the * character to enhance results from a partial word. For example, "tall" will return "tall", while "tall*" will return "tall", "taller", and "tallest".
- f. To **refine** a search (search a subset):
 1. Start with the Search Results window open, showing the results of a previous search. If the Search window is hidden, display it by choosing "Tools > Search > Query" or by clicking the Search Query button on the toolbar.
 2. In the Search window, edit or replace the typed query that produced the initial list of documents.
 3. Press and hold **Ctrl** (Windows) or **Option** (Macintosh). The Search button label will change to "Refine". Click "Refine". This produces a Search Results list that is a subset of the initial list that matches the new query also.
- g. Additional information is available via "Acrobat Reader's Help > Plug-In Help > Using Acrobat Search" (only available if "Reader with Search" is installed).

SYSTEM REQUIREMENTS FOR INDEXED WORD SEARCH

- a. "Adobe Acrobat Reader with Search" is required to employ the embedded indexed 'word search capability'. Adobe has not created "with Search" readers for all platforms.
- b. Visit Adobe's web site (www.adobe.com) to obtain newest releases (as available) of the Readers.