Guide to the Robert L. Forward papers

Processed by Sara Seltzer, 2012.
Special Collections & Archives
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**Descriptive Summary**

**Title:** Robert L. Forward papers

**Date (inclusive):** circa 1865-2001, undated.

**Date (bulk):** 1956-2001

**Collection Number:** MS 175

**Creator:** Forward, Robert L.

**Extent:** 60.0 linear feet (2 flat boxes, 16 record storage boxes, 24 document boxes, 108 volumes).

**Repository:** Rivera Library. Special Collections Department.

Riverside, CA 92517-5900

**Abstract:** The Robert L. Forward papers contain official documents, literary works, correspondence, memorabilia, scientific research, and the personal library of Dr. Robert L. Forward, an American physicist and prolific science-fiction author. The bulk of the papers pertain to Dr. Forward's scientific and literary careers, though material regarding personal accomplishments and activities is also included.

**Languages:** The collection is primarily in English. Select material is in German, Japanese, Danish, Spanish, and Slavic languages.

**Collection Access**

This collection is open for research, with the exception of select files and items that are restricted. Access to restricted materials is subject to approval. Please submit written requests to the Head of Special Collections & Archives.

**Publication Rights**

Copyright has not been assigned to the University of California, Riverside Libraries, Special Collections & Archives. All requests for permission to publish or quote from manuscripts must be submitted in writing to the Head of Special Collections & Archives. Permission for publication is given on behalf of the Regents of the University of California as the owner of the physical items and is not intended to include or imply permission of the copyright holder, which must also be obtained by the researcher.

**Preferred Citation**

[identification of item]. Robert L. Forward papers, MS 175. University of California, Riverside Libraries, Special Collections & Archives, University of California, Riverside.

**Acquisition Information**

The Robert L. Forward papers were acquired as a gift in 1988.

**Processing History**

Processed by Sara Seltzer, 2012.

**Biography**

The following biography was taken from *The New York Times*:

"Robert L. Forward, a science fiction writer, physicist and inventor whose 11 novels were inspired by his research into gravitational physics and advanced space propulsion, died at his home in Seattle on September 21, 2002. He was 70. The cause of death was cancer, his son-in-law, Ben Mattlin, said.

With his first book, "Dragon's Egg" (1980), Dr. Forward established a reputation as a creator of fantastic worlds that were solidly based on scientific principles. He set "Dragon's Egg" and its sequel, "Starquake" (1985), on a neutron star, a highly compressed remnant of an exploding star where gravity is 67 billion times stronger than Earth's. The star's inhabitants, whom he called cheelas, lived the equivalent of about 45 minutes.

In his final book, "Saturn Rukh" (Tor/Tom Doherty, 1997), his attention to accuracy led him to include an appendix of mathematical tables and astronomical diagrams for readers interested in verifying the maneuvers of the book's spacecraft. He also wrote "The Flight of the Dragonfly" (1984), which he renamed "Rocheworld" and followed with four sequels.

Dr. Forward, who held a Ph.D. in physics from the University of Maryland, began his literary career while working as a senior scientist at the Hughes Aircraft Company's laboratory in Malibu, Calif. He often explained that he had advised so many science fiction writers on the technical details of space flight and other scientific issues that he decided to take up writing himself.

At Hughes and later at companies he founded, Forward Unlimited (in 1987) and Tethers Unlimited (in 1994), Dr. Forward devoted his research efforts to propulsion systems for space travel. He studied the potential for antimatter propulsion (similar to the system that powers the Starship Enterprise on "Star Trek") for the Air Force and NASA."
For epic interstellar journeys, he envisioned a rocketless vehicle that would be manufactured in space and equipped with an ultrathin sail as big as Texas. The ship would be propelled by a laser beam or high-energy particles shot from Earth; traveling at 55,000 miles per second, it would reach the nearest star system, Alpha Centauri, in less than 50 years.

Dr. Forward applied this concept of heavenly sailing ships to a somewhat more practical purpose when he designed a satellite, called a statite, that could hover 200,000 miles above one of the poles, held in place by sails filled by solar winds. In 1993 his design won a patent, one of the 20 that he received.

Robert Lull Forward was born in Geneva, N.Y., on Aug. 15, 1932. He served in the Air Force, reaching the rank of captain. He received his bachelor’s degree in physics from the University of Maryland and a master’s in applied physics from the University of California at Los Angeles. For his doctorate he built and operated the world’s first bar antenna for the detection of gravitational radiation, which is now at the Smithsonian Institution.

He is survived by his wife of 48 years, Martha; three daughters, Julie Fuller, of Ramona, Calif.; Mary Lois Mattlin, of Los Angeles; and Eve Forward-Rollins, of Seattle; his son, Robert, of Los Angeles; and seven grandchildren.

Dr. Forward received much praise for his science fiction novels, although it was sometimes qualified. In The New York Times Book Review in 1993, Gerald Jonas wrote that in “Camelot 30K” Dr. Forward wasted “no time on frills like plot and character development.” Still, Mr. Jonas concluded, “he has fashioned an intellectual puzzle, pure and simple, with a wonderfully clever solution that blew my own tentative hypotheses sky-high.”


Collection Scope and Content Summary
The Robert L. Forward papers contain official documents, literary works, correspondence, memorabilia, scientific research, and the personal library of Dr. Robert L. Forward, an American physicist and prolific science-fiction author. The bulk of the papers, dating from 1956-2001, document Dr. Forward's scientific and literary careers. Records are both personal and professional in scope and pertain to business enterprises, the writing and revision of science-fiction and non-fiction literature, extracurricular projects and activities, and research on antimatter, gravity, propulsion, and other physics-related topics. Formats include contracts, patents, manuscripts, publications, correspondence, photographs, notes, and other material.

Collection Arrangement
Material has been kept in the order preserved at the time of acquisition. For many files, this represents the original order maintained by Dr. Robert L. Forward. Consequently, select folders contain items outside the scope of their respective series.

This collection is arranged into six series and thirteen sub-series. The series and sub-series arrangement is as follows:

Sub-series 5.4. Lectures, seminars, and workshops, 1974-1995, undated.

Indexing Terms
The following terms have been used to index the description of this collection in the library's online public access catalog.

**Subjects**
Hughes Aircraft Company. Research Laboratories.
Physicists.
Physics.
Science fiction.
Science-fiction writers.
University of California, Riverside. Library. Eaton Collection of Science Fiction & Fantasy.

**Genres and Forms of Materials**
Books.
Business records.
Clippings (information artifacts).
Correspondence.
Manuscripts.
Periodicals.
Photographs.
Realia.
Research notes.
Technical writing.

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**Series 1. Official documents. 1965-2001, undated.**

**Series Scope and Content Summary**
This series is comprised of contracts, patents, correspondence, and other material documenting the business enterprises of Robert L. Forward. Records pertain to Dr. Forward's literary works, scientific inventions, and contracted consulting services, including speaking engagements, research and experimentation, and other endeavors.

The correspondence included in this series is either related to the formulary documents contained here, or explicitly pertains to business discussions.

*For additional communications pertaining to Forward's business-related activities, please consult "Series 3. Correspondence."

*Select documents pertaining to the patenting of inventions and contractual agreements can also be found in "Series 5. Scientific research."

*Because many folders maintain the original filing scheme of the creator, select records outside the scope of this series are included.*

**Series Arrangement**
This series is arranged sequentially by box and folder number.

**Series Access**
Select files and items in this series are restricted. Access to these materials is subject to approval. Please submit written requests to the Head of Special Collections & Archives.

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**Box 6, Folder 4-5**

**Contracts, correspondence, and other material regarding select literary works of Robert L. Forward (photocopies). 1979-2000, undated.**

**Note on Access**
Restricted.
| Box 7, Folder 1, Box 6, Folder 6 | Contracts, correspondence, patents, and other material regarding select literary works and scientific inventions of Robert L. Forward (includes photocopies). 1982-2001, undated.  
Note on Access  
Includes restricted materials. |
| Box 7, Folder 2 | Contracts, correspondence, royalties, and other material regarding the publication and sales of *Future Magic* (includes photocopies). 1965-circa 1993.  
Note on Access  
Restricted. |
| Box 7, Folder 3 | Contracts and correspondence regarding Robert L. Forward's advisory services for the company BlastOff!. 2000, undated.  
Note on Access  
Restricted. |
| Box 13, Folder 2 | Documents regarding the invention disclosure and patentability of Robert L. Forward's Polestat TM space communications system concept. 1988. |
| Box 13, Folder 3-4 | Correspondence, application forms, patent, and other material regarding Robert L. Forward's invention Statite: Spacecraft that Utilizes Sight Pressure and Method of Use. 1987-1993, undated.  
Note on Access  
Includes restricted materials. |
| Box 14, Folder 11 | Contracts, proposals, and other material regarding Robert L. Forward's study of alternate propulsion energy sources for the Air Force Rocket Propulsion Laboratory (includes photocopies). 1982-1983. |
| Box 14, Folder 16 | Patents regarding inventions developed by Joseph Weber and Joseph Weber et al.  
| Box 14, Folder 18 | Correspondence regarding the revision and publication of two submissions to Analog magazine. 1989-1990.  
Note on Access  
Includes restricted materials. |
| Box 15, Folder 7 | Correspondence regarding publication of *Camelot 30k* and Forward's literary representation. Includes drafts of *Camelot 30k* prologue copyedited by Robert L. Forward. 1992-1993, undated.  
Note on Access  
Includes restricted materials. |
Note on Access  
Includes restricted materials. |
| Box 21, Folder 6 | Correspondence to Robert L. Forward from book publishers. 1991.  
Note on Access  
Includes restricted materials. |
<table>
<thead>
<tr>
<th>Box/Folder</th>
<th>Description</th>
</tr>
</thead>
</table>
| Box 24, Folder 4-5 | Financial records pertaining to publication, travel, and other work-related expenses, primarily those incurred while under contract with the United States Air Force (includes photocopies). 1987-1992.  
Note on Access  
Restricted. |
Annotation by Robert L. Forward  
"Archivist: Everything in this box should be bound in one volume in the order arranged."  
[Binding never completed.] |
Annotation by Robert L. Forward, 3 May 2002  
"Contract with Air Force Rocket Propulsion Lab for 100 days of consulting on Advanced Propulsion Physics Research including monthly reports."  
Note on Access  
Includes restricted materials. |
| Box 25, Folder 34 | Correspondence regarding a hypersonic tether consulting project. Includes proposal and technical discussions. 1997-1999.  
Note on Access  
Includes restricted materials. |
| Box 26, Folder 5 | Correspondence, clippings, and other material regarding Robert L. Forward's contribution to a BBC documentary series on time travel (includes reproductions). 1996. |
| Box 32, Folder 4 | Correspondence and documents regarding Robert L. Forward's speaking engagement at the symposium Earth, Environment and Space in Okayama, Japan (includes reproductions). 1990-1991.  
Note on Access  
Includes restricted materials. |
Note on Access  
Restricted. |
| Box 32, Folder 14 | Contracts and other material regarding literary works (includes photocopies). 1974-1982, undated.  
Note on Access  
Restricted. |
| Box 33, Folder 26-27 | Correspondence, patents, contracts, and other material regarding Robert L. Forward's statite invention (includes reproductions). Notes, drafts, and excerpts from publications used for research are also included. 1979-1994, undated.  
Note on Access  
Includes restricted materials. |
Box 33, Folder 30  
**Publishing agreement for Robert L. Forward's contribution to Project Solar Sail.**  
Note on Access  
Includes restricted materials.

Box 33, Folder 34  
**Correspondence, annotations, and other material regarding Robert L. Forward's consulting services for a Time-Life Books project (includes reproductions).** 1989.  
Note on Access  
Includes restricted materials.

Series 2. **Literary works. 1961-circa 1998, undated.**

Series Scope and Content Summary  
This series contains page proofs, galley proofs, drafts, notes, and other unpublished material pertaining to the literary works, both science-fiction and non-fiction, of Robert L. Forward. Bound and unbound manuscripts are included, with the bulk of the papers containing copyedits by Dr. Forward and/or publishing staff. Many manuscripts are also autographed by Robert L. Forward and, occasionally, co-authors. All copyedits and autographs were made by Dr. Forward unless otherwise noted. Bylines are provided exclusively for co-authored works, works by other authors, and works citing more than one creative role.  
When multiple copies or drafts of a short story, outline, or article are present, the number of items is noted in a single description. Separate descriptions are given for Forward's novel-length works and bound volumes, which often contain significant variations. According to one annotation by Dr. Forward, his literary works were often printed out at various stages of editing, resulting in the many iterations that are contained in the archives.  
Series Arrangement  
This series is arranged into three sub-series:  
Sub-series 2.1. Manuscripts (bound).  
Sub-series 2.2. Manuscripts (unbound).  
Sub-series 2.3. Notes, artwork, and other material.  
Series Date Disclaimer  
Dates are primarily taken from manuscript title pages and are of the following types: copyright dates (year), draft dates (day, month, year), or the date range during which the manuscript was edited or annotated (day, month, year, as documented by Forward).  
When no definitive date is present on the title page, dates are taken from the book spine (month and year; or, day, month, year), the manuscript itself (format varies), or other sources in the collection (approximate years).

Sub-series Scope and Content Summary
This sub-series contains the literary works of Robert L. Forward that were selected for binding in book form by Dr. Forward. The volumes are comprised of draft versions of Forward’s science-fiction and non-fiction writings. The bulk of the manuscripts are heavily copyedited by Dr. Forward and/or publishing staff. Many manuscripts are also autographed by Forward and, occasionally, co-authors. All copyedits and autographs were made by Dr. Forward unless otherwise noted. Bylines are provided exclusively for co-authored works, works by other authors, and works citing more than one creative role.

Dr. Forward frequently inscribed his manuscripts with brief, contextual descriptions regarding the publication or revision of the work in hand. For those items containing such annotations, pertinent information is transcribed in a supplementary note.

Sub-series Arrangement
Manuscripts are arranged alphabetically by title. Works of the same name are arranged chronologically.

Sub-series Note on Ride the Magic Dragonfly
This series contains multiple iterations of Forward’s science-fiction novel originally entitled Ride the Magic Dragonfly. The majority of the bound copies of this work have the title Flight of the Dragonfly printed on the book spine, which was the revised title of the finished manuscript.

Prior to publication as a book, the novel was serialized under the title Rocheworld. Like the iterations of Ride the Magic Dragonfly, select bound copies of Rocheworld have the title Flight of the Dragonfly printed on the book spine.

On Shelf

On Shelf
Dragon’s Egg (2nd draft; two copies). 1978.

On Shelf

On Shelf
Dragon’s Egg (6th draft). Includes copyedits by publishing staff. circa 1979.

On Shelf

On Shelf

On Shelf

On Shelf

On Shelf

On Shelf

On Shelf

On Shelf
Annotation by Robert L. Forward, 23 March 1986
"Next to last draft."

On Shelf

Annotation by Robert L. Forward
"Original of manuscript accepted by Avon in April. One last edit to correct minor errors and typos. 0930 PDT 27 May 1986 on Flight TWA 38 to Philadelphia to present paper on interstellar beamed power spacecraft at AAAS meeting. (Isaac Asimov is on same program.).

Black pen marks were those found on 23-24 March before sending to publisher. Purple pen marks are corrections made on AAAS trip. Green pen marks are changes suggested by Charles Sheffield inserted on 1 June 1986. Red marks are insertion of Figure information on 14 June 1986."


Annotations by Robert L. Forward
- "20 Oct 1988 - Started final edit - need to cut some.
- 21 Oct 1988 - Started second runthrough - change Tanya to a blue-eyed blonde.
- 30 Oct 1988 - Still no reply from Chris McKay & Penny Boston - will have to proceed.
Need to write an "About the author".


Annotations by Robert L. Forward
- "0846 23 March 1989 - On TWA 894 on way to Balticon. Working on del Rey recommended revisions.
- 1102 11 May 1989 - One more time through."


Mirror Matter by Robert L. Forward and Joel Davis. 1988.

Annotation by Robert L. Forward, 5 December 1987, Tigh Fada, Reay, Scotland
- "Copyedited manuscript received from Wiley/Publishing Synthesis, Ltd on 3 December. Got a call from Hoffer of Wiley just after Datapost had dropped off package. He was in a hurry - so I sat down, read it in 5-6 hours, then called Joel with major changes - some of which he argued me out of."


Annotation by Robert L. Forward, 10 March 1981
This version retired 11:01 PDT 10 March 1981."


Annotation by Robert L. Forward, 21 April 1981
- "This draft also includes partially revised sections on STOPPING and LANDING which were typed out midway from last draft. Some of the indicated corrections to HEARINGS were postponed to a later draft.
Put into archive box 10:39 PST 21 April 1981. Replacement dated 21 April 1981. Only one copy of 21 April 1981 version made. Will pick up tomorrow at USC on way to AVS speech, then work on it while in Albuquerque (again)."
On Shelf  

Annotation by Robert L. Forward  
"This version printed out by mistake without formatting activated. Wrote some more in Albuquerque and put in 25 April 1981 version."  
Annotation by DFM, 12/1/89  
"Loss of words at top & bottom of each page due to computer print out format. Bound thusly as per R.L.F."  

On Shelf  

Annotation by Robert L. Forward, 19 June 1981  
"This last partial draft was finished off to produce the first full draft of the Rocheworld saga. There were some intermediate printouts of the remaining chapters as they went from their first typing phase to their edited phase. These are inserted in their proper places. The final editing and typeout was completed on 19 June 1981, with the final tape-in of figures on the 20th.  
The following version is the first full draft of RW with a publication date of 20 June 1981 and consists of a typed original and 15 Xerox copies that were sent out to my technical reviewers for comments. Copies also went to Lester del Rey of Ballantine and Dr. Stanley Schmidt of Analog as possible serial material."  

On Shelf  

Annotations by Robert L. Forward  
"30 Oct 1981 - Lester has still not read this. I will do it myself. Judy-Lynn del Rey says get it below 120,000 words, but keep appendix (although I will cut it). Will start by putting reviewer comments into MS using green.  
31 Dec 1981 - Talk about writer’s block! Finally back to this after doing nothing over Thanksgiving and Christmas. Did do "Starhope - The World", "Future Magic", and "The Judge".  
9 Jan 1982 - Not much done - back to grindstone - talked to Ashley."  

On Shelf  

Annotation by Robert L. Forward, 1554 Tuesday 19 Sept 1989  
"This was the printout of the largest electronic version of Rocheworld that I could find. It was on USC tape 5WARD as file ROCHEWOR.81JUN24. Jacqueline Stafsudd finally was able to read the ancient tape and transfer it to an IBM compatible disk.  
Before I typed this I did a little bit of editing to remove the old word processing formats. I then compared this version, chapter by chapter, with the Baen paperback and the 150,000 25 March 1982 version (bound as Flight of the Dragonfly at Eaton Collection), and made insertions, deletions and changes to get the 17 September 1989 version of Rocheworld (160,000 words + 12 figures).  
This involved breaking Karin Krupp back into two females, changing the name of Eve into Shirley, and restoring Dr. Wang as a male who dies on the way to Barnard. I also had to type in the Baen Book chapter "Reporting" and type in the long version of Arielle’s "Flight" sequence from the 1982 version.  
I will now do a final edit on the 17 September 1989 version."  

On Shelf  

<table>
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<tr>
<td></td>
<td>Annotation by Robert L. Forward</td>
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<tr>
<td></td>
<td>&quot;Copy 7 of 7 copies.&quot;</td>
</tr>
<tr>
<td></td>
<td>Annotations by Robert L. Forward</td>
</tr>
<tr>
<td></td>
<td>&quot;25 April 1982 - Title page autographed by Forward.</td>
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<tr>
<td></td>
<td>6 May 1982 - Telephone call from Stanley Schmidt of Analog. Will serialize it as &quot;Rocheworld&quot;. RF.</td>
</tr>
<tr>
<td></td>
<td>17 May 1982 - Stanley Schmidt makes some corrections.&quot;</td>
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<td>Annotation by Robert L. Forward</td>
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<tr>
<td></td>
<td>&quot;One of about 5 xeroxes of original ms.&quot;</td>
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<tr>
<td></td>
<td>Annotation by Robert L. Forward</td>
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<tr>
<td></td>
<td>&quot;(Last and final edit for Pocketbooks).&quot;</td>
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<tr>
<td></td>
<td>Annotation by Robert L. Forward, 2043 Monday 25 September 1989</td>
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<tr>
<td></td>
<td>&quot;This is an incomplete collection of pages from the final draft that were retyped because of printer errors (it was very hot today and the &quot;ch&quot; combination often jammed), typos, or errors. This should probably be bound in same volume as next to last draft. Last pages 2129 - 27 Sept 1989.&quot;</td>
</tr>
<tr>
<td></td>
<td>Annotation by Robert L. Forward, 1524 Monday 25 September 1989</td>
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<tr>
<td></td>
<td>&quot;This was the next to the last draft of the revised version of Rocheworld, see page ii for its genesis. After this draft was corrected (in the period from 17-23 September 1989) the corrections were made in the electronic version and the &quot;final&quot; draft printed. The final draft will be copyedited and pages retyped to get a nearly error proof final draft.&quot;</td>
</tr>
<tr>
<td>On Shelf</td>
<td><strong>Rocheworld: Part 1.</strong> Includes copyedits and documentation by Baen Books publishing staff. circa 1990.</td>
</tr>
<tr>
<td></td>
<td>Annotation by Robert L. Forward, 1524 Monday 25 September 1989 (title page photocopied from Part 1)</td>
</tr>
<tr>
<td></td>
<td>&quot;This was the next to the last draft of the revised version of Rocheworld, see page ii for its genesis. After this draft was corrected (in the period from 17-23 September 1989) the corrections were made in the electronic version and the &quot;final&quot; draft printed. The final draft will be copyedited and pages retyped to get a nearly error proof final draft.&quot;</td>
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<tr>
<td>On Shelf</td>
<td><strong>Rocheworld: Part II.</strong> Includes copyedits by Baen Books publishing staff. circa 1990.</td>
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<td>Document</td>
<td>Date</td>
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<tr>
<td><em>Starquake!</em></td>
<td>July 29, 1984</td>
</tr>
<tr>
<td><em>Starquake!</em></td>
<td>November 25, 1984</td>
</tr>
<tr>
<td>Annotation by Robert L. Forward</td>
<td></td>
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<tr>
<td><em>Starquake!</em></td>
<td>November 25, 1984</td>
</tr>
<tr>
<td>Annotation by Robert L. Forward</td>
<td></td>
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<tr>
<td><em>Starquake!</em></td>
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<tr>
<td><em>Starquake Outlines: May-August 1982</em></td>
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<tr>
<td><em>Timemaster</em></td>
<td>April 24-June 13, 1990</td>
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<tr>
<td>Annotation by Robert L. Forward</td>
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<td>Annotation by Robert L. Forward</td>
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<tr>
<td><em>Timemaster</em></td>
<td>July 26-August 20, 1990</td>
</tr>
<tr>
<td>Annotation by Robert L. Forward</td>
<td></td>
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<tr>
<td><em>Timemaster</em></td>
<td>August 20-22, 1990</td>
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<tr>
<td>Annotation by Robert L. Forward</td>
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<tr>
<td><em>Timemaster Outlines</em></td>
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</table>
Sub-series Scope and Content Summary

This sub-series contains the unbound literary works of Robert L. Forward, which primarily consist of draft versions of Forward's science-fiction and non-fiction writings. While it is often difficult to distinguish a so-called "science fact" article from a piece of technical writing, the title page format used by Dr. Forward often helps to identify a work as one or the other. Non-fiction, science fact articles typically refer to Forward's literary representation on the title page, though this is not universal. Conversely, his technical writings cite his work affiliation with Hughes Research Laboratories or Forward Unlimited.

Many of the manuscripts, though left unbound, were arranged by Dr. Forward shortly before his death. Notes identifying a selection of papers are frequently inserted, and occasionally provide contextual or other background information about a work. As with the bound manuscripts, select items also contain inscriptions of a similar type. For those resources containing such annotations, pertinent information is transcribed in a supplementary note. Select papers that were originally intended for binding are also identified as such in a supplementary note.

The bulk of the manuscripts are heavily copyedited by Dr. Forward and/or publishing staff. Many manuscripts are also autographed by Robert L. Forward and, occasionally, co-authors. All copyedits and autographs were made by Dr. Forward unless otherwise noted. Bylines are provided exclusively for co-authored works, works by other authors, and works citing more than one creative role.

Sub-series Arrangement

Manuscripts are arranged alphabetically by title. Works of the same name are arranged chronologically.

Box 14, Folder 4

**Acceleration Constant.** Includes copyedits by publishing staff, probably from Scott Meredith Literary Agency, Inc. undated.

**Alien Life Between the Planets and the Stars.** April 8, 1995.


Annotations by Robert L. Forward

"Archivist - I will be writing this book backwards, starting with the last chapter and notebook and adding previous chapters one at a time and then smoothing forward to end. This is to insure climax stays fixed and isn't telegraphed too early - yet all the clues are there." [inscribed on text]

"Chapter by Chapter (from back) rework of novel." [separate sheet]

Box 28, Folder 1-2

**Camelot 30K.** Autographed with copyedits. September 13-20, 1992.

Annotations by Robert L. Forward

"On this day, 17 September 1992, at 1800 British Daylight Time, this "Creation draft" of Camelot 30K, was finished. There is still a lot to do - additions, corrections, editing - but the basic plot line is established.

20 Sept. - The new draft was completed.

I will now edit this draft, and work on getting a usable version to my Scotland friends before leaving next Wednesday, 23 Sept 1992. Pontifically Yours!"

Annotation by Robert L. Forward, 17 Sept 1992

""Creation" Draft (first complete story)."

Box 34, Folder 11-12


Annotation by Robert L. Forward, 21 September 1992

"Archivist:

This copy of the final version of Camelot 30K was sent to the Editor, Dave Hartwell at Tor Books, for his approval and acceptance."
Box 28, Folder 3-4  **Camelot 30K. Autographed with copyedits. September 20-November 4, 1992.**
Annotations by Robert L. Forward
23 September - Editing on flight from LHR to Newark - [Connoisseur] Class upgrade.
Did chapters 00, 01, 02 - Naptime - I think it's good so far.
29 Sept 1992 - Editing on flight from STL to DCA.
3 Oct 1992 - Editing on flight from DCA to STL to SEA.
4 Nov 1992 - Added Prologue & Dave Lynch comments." [inscribed on text]
"ready for binding" [separate sheet]

Box 27, Folder 13-14  **Camelot 30K. Autographed with copyedits. November 10-December 4, 1992.**
Annotations by Robert L. Forward
"30 Nov 1992 - Inserting suggestions from Seichi Kiyohara.
4 Dec 1992 - Last read through.
Next to last draft of Camelot 30K. Final draft dated 11 Dec 1992."

Box 27, Folder 11-12  **Camelot 30K. Autographed. December 11, 1992.**
Annotation by Robert L. Forward
"Original of final draft. Xeroxes were sent to publisher and agent."

Box 34, Folder 13-14  **Camelot 30K (photocopy). Autographed with copyedits by Robert L. Forward.**
Includes copyedits and style sheets from Tor Books copyeditor.
Annotation by Robert L. Forward, 25 January 1993
"Started work on checking this copyedited version."

Box 27, Folder 9-10  **Camelot 30K. Includes notes to copyeditor and compositor, correspondence from Robert L. Forward to David Hartwell (Tor Books), and correspondence from Tom Doherty Associates, Inc. to Robert L. Forward. December 11, 1992; March 15, 1994.**

Box 34, Folder 7-8  **Camelot 30K (galley proofs). Includes correspondence from Robert L. Forward to Don Keller, Tor Books (reproduction). 1993.**

Box 34, Folder 9-10  **Camelot 30K (page proofs). Autographed with copyedits (photocopy). May 11, 1993.**
Annotation by Robert L. Forward, 11 May 1993
"Author's Corrections."

Box 14, Folder 7  **Camelot Titania (two drafts). Includes copyedits. October 17-18, 1990.**

Box 14, Folder 6  **Camelot Titania. Autographed. Includes correspondence from Robert L. Forward to Russell Galen, agent with Scott Meredith Literary Agency. October 19-26, 1990.**
Annotation by Robert L. Forward, 26 Oct 1990
"Russell asked for a more upbeat ending. I wrote one and faxed/FedExed it to him."

Box 13, Folder 8  **The Cerebrated Jumping Frog of Calaveras III by Martha Dodson Forward and Robert L. Forward. Includes copyedits by publishing staff. undated.**

Box 8, Folder 7  **Cheela to the Rescue!, Acceleration Constant, Twinkle, Twinkle, and The Singing Diamond (manuscript and clipping). December 6, 1978-November 2, 1980, undated.**

Box 26, Folder 14  **Cold Comfort (three drafts). Includes copyedits. June 16-August 21, 1989.**

Box 41  **Dragon's Egg (galley proof). Includes copyedits by Robert L. Forward and copyeditors. circa 1980.**
Box 29, Folder 12  
Annotation by Robert L. Forward, 3 May 2002  
"Published in Analog."

Box 13, Folder 7  
**Fading into Blackness** (manuscript and galley proof). Includes copyedits by publishing staff from Analog Science Fiction/Science Fact. 1988, undated.

Box 33, Folder 23  
**Faster-Than-Light** (Science Fact Article). Includes copyedits by Analog copyeditors. June 27, 1994, undated.

Box 26, Folder 17  

Box 20, Folder 3  
**Flattening Spacetime**. Analog galley proof with copyedits by publishing staff. undated.

Box 26, Folder 12  
**Flattening Spacetime** (five drafts). Includes copyedits. November 12-17, 1981.  
Annotation by Robert L. Forward, 3 May 2002  
"Sold to Analog as a Science Fact article."

Box 30, Folder 1,  
Box 29, Folder 19  
Annotation by Robert L. Forward  
"Next to last draft: Finished editing 15 Dec 1993."

Box 29,  
Folder 17-18  
Annotation by Robert L. Forward  
"Last, last draft before final printout with consecutive page numbers and figure pages worked out."

Box 29,  
Folder 15-16  

Box 25,  
Folder 37-38  
**Magic Matter** (chapter from Future Magic). Includes copyedits by publishing staff. undated.

Box 9, Folder 1  

Box 38, Folder 12  
**Marooned on Eden** by Robert L. Forward and Martha Dodson Forward (page proofs; includes only author-corrected pages). Includes copyedits and correspondence to Martha Dodson Forward from Barbara Van Tine, Baen Books production manager. undated.

Box 25,  
Folder 40-41,  
Box 26, Folder 1-4  
Annotations by Robert L. Forward  
"MAROONED ON EDEN  
Probably ready for binding." [separate sheet; these three drafts were intended to be bound as one volume].

June 28, 1992 draft:  
May 1992 draft:  
"20 May 1992 - LAX - chaps 00-02 30 May 1992 - Reay -"


Annotation by Robert L. Forward

"1st rework draft of MOE plus two earlier rewrites of chapt one."


Annotation by Robert L. Forward

"Last rewrite of *Marooned on Eden*. Disk was sent to Baen 31 March 1993. No printout of final version was made."


Annotation by Robert L. Forward

"This is a major edit of everything written up to this point."


Annotation by Robert L. Forward, 31 August 1988

"Editing carried out while on trip back to the USA."


Annotation by Robert L. Forward (on separate sheet)

"There is no title page or Chapter 1 to this version of MARTIAN RAINBOW ~ 11-30 Sept 1988 (I was reworking a number of later chapters to take care of a half-year error in the timeline between Earth and Mars. Ended up shifting the story 4 years." [see note dated 11 Sept 1988 after Chapter 13 (A4 paper)].

Box 30, Folder 4-5  *Martian Rainbow*. Includes autograph and correspondence to and from Lester del Rey, Del Rey Books. March 2-May 20, 1989.

Annotation by Robert L. Forward, 20 May 1989

"Hopefully final version sent to Del Rey Books with corrections and changes (10) made in response to Lester del Rey letter of 2 March 1989. Two xeroxes were made. One sent to Russell Galen for copying and distribution. One to Phyllis & Al Eisenstein for checking - I will collect and use."

Box 30, Folder 2-3  *Martian Rainbow* (galley proofs). Includes autograph, copyedits (photocopied), and correspondence between Robert L. Forward and publishing staff at Del Rey Books. 1991.


Annotation by Robert L. Forward

"Found in 1994 while cleaning out Russell Galen's files at SMLA. Probably from circa 1985."


Annotation by Robert L. Forward, 18 February 1992

"Sent to Analog."
<table>
<thead>
<tr>
<th>Box, Folder</th>
<th>Title and Details</th>
</tr>
</thead>
</table>
Annotation by Robert L. Forward  
"Submitted to Analog magazine." |
Annotations by Robert L. Forward  
"Martha's Edit Started (in green ink) 23 October 1993. 28 October 1993 Bob started input of Martha's adds. 30 October 1993 - adding his own changes in at the same time. Martha's Edit Finished 3 Nov 1993." |
Annotations by Robert L. Forward  
"4 November 1993 - Started next-to-final edit.  
8 November 1993 - Finished." |
Annotations by Robert L. Forward  
"9 November 1993 - Started final edit.  
11 November 1993 - Disks off to Baen." |
Annotations by Robert L. Forward  
Annotation by Robert L. Forward, 3 May 2002 (on separate sheet)  
"Couldn't sell to Analog ended up putting it in Indistinguishable From Magic ." |
| 18, Folder 2 | *Race to the Pole* and *Polesitters*. August 3, 1989. |
Annotation by Robert L. Forward  
"Next to last draft." |
Annotation by Robert L. Forward  
"Final Draft." |
Annotation by Robert L. Forward  
"ready to bind." |
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Annotation by Robert L. Forward</td>
<td>&quot;Replaced by disk from Julie - ooooooo.lst.&quot;</td>
</tr>
<tr>
<td>Box 34, Folder 1-2</td>
<td><em>Rescued From Paradise</em> by Robert L. Forward and Julie Forward Fuller. Includes copyedits by Robert L. Forward and others, probably members of the Forward family. March 1994.</td>
</tr>
<tr>
<td>Annotation by Robert L. Forward</td>
<td>&quot;RFP Chapter Edits after 24 March 1994.&quot;</td>
</tr>
<tr>
<td>Annotation by Robert L. Forward</td>
<td>&quot;4 versions including final one sent to Baen.&quot; [Each version has inscriptions.]</td>
</tr>
<tr>
<td>Box 2, Folder 5-6</td>
<td><em>Ridge the Magic Dragonfly</em>. June 20, 1981.</td>
</tr>
<tr>
<td>Annotation by Robert L. Forward</td>
<td>&quot;Copy 2 of original kept to compare with Baen page proof. Didn't need detailed comparison.&quot;</td>
</tr>
<tr>
<td>Annotation by Robert L. Forward</td>
<td>&quot;Back to work on manuscript after finishing off NASA Phase I contract on Failsafe Multistrand Tethers.&quot;</td>
</tr>
<tr>
<td>Annotations by Robert L. Forward</td>
<td>&quot;24 September 1995 - At IAD waiting 8 hours for flight to LHR. 11 October 1995 - Put in edits to chapters 00-04. 05-08 still draft notes.&quot;</td>
</tr>
<tr>
<td>Annotations by Robert L. Forward</td>
<td>&quot;14 November 1995 - Editing in Caithness General Hospital after &quot;angina&quot; attack. Corrections made by 16 Nov.&quot;</td>
</tr>
<tr>
<td>Annotations by Robert L. Forward</td>
<td>&quot;Edit completed March 18, 1996. Other comments by Julie Forward Fuller.&quot;</td>
</tr>
</tbody>
</table>

Annotations by Robert L. Forward
"1 June 1996 - "Editor's Cut" Version. Going through again to: put in Latin Names, correct minor errors - and to make changes David Hartwell (the dreaded editor) would like to see made.
19 July 1996 - Inserting Changes."


Annotation by Robert L. Forward
"Sent to Stan Schmidt, Analog."


Timemaster. Autographed with copyedits. September 4-October 6, 1989.

Annotation by Robert L. Forward
"29 September 1989 - Returning to work on TIMEMASTER after spending almost full time in the last three weeks working on RW-II, the 155,000 word version of ROCHEWORLD. Now to get out my calculator and see if the plot line holds together at 1-30 gees instead of at 100 gees.
6 Oct 1989 - Was able to do it by reversing Randy travel. Will have to rework timeline."


Annotation by Robert L. Forward
"Back to work on novel after having written or rewritten something like 8 papers and articles on advanced propulsion for my AFAL contract. One paper "Cable Catapult" has an "acknowledgement" to "Harold Randolph Hunter and his crew at Reinhold, Inc." since I invented the concept while writing the novel."


Annotation by Robert L. Forward
"Starting final edit, on 12 September 1990.
Inserting corrections on 14 September 1990. Printing out as I go along. Should be done by tomorrow if printer holds out.
Printed out 14 Sept 1990. Will mail tomorrow."


Annotations by Robert L. Forward
"3 May 1991 - Reworking per Hartwell's suggestions.
Dear Archivist:
This stack is arranged in the order I worked on it. There are portions of chapters interleaved as flashbacks into other chapters, and some chapters were typed out, re-edited, and typed out again. A real mess - but that is the way I worked on it."


Annotation by Robert L. Forward
"Next to last draft of revised version."
Box 27, Folder 1, Box 26, Folder 28
Timemaster. Autographed with copyedits. Includes two versions of chapter one.
Annotations by Robert L. Forward
"Working on second set of Hartwell corrections, plus any I come up with on re-read.
5 July 1991 - In Tigh Fada, Reay, Scotland. Will restart rework from beginning with shortened Chapter 1.
12 July 1991 - Typed out final version."

Box 35, Folder 1-2

Box 28, Folder 8-9
Annotation by Robert L. Forward (on separate sheet)
"Archivist: Manuscript returned from Tor Books w/o cover pages. It does not contain copyeditor marks."

Box 28, Folder 6-7

Box 26, Folder 25

Box 23, Folder 1-2
Timemaster (galley proofs; photocopy). Includes copyedits and correspondence between Robert L. Forward and Donald G. Keller, Tor Books. 1992.

Box 34, Folder 17-18
Annotation by Robert L. Forward
"Copyedited 9 Jan 1992."

Box 26, Folder 9
Annotation by Robert L. Forward (on separate sheet)
"Sold to Analog in a drastically cut version. Full version in IFM."

Box 13, Folder 9

Box 14, Folder 14

Box 29, Folder 13

Box 21, Folder 3
When you live upon a star...makes some difference what you are (photocopy). Feature prepared for New Scientist. Includes copyedits by Robert L. Forward and others, probably publishing staff. undated.

Box 26, Folder 18
Annotation by Robert L. Forward, 13 January 1992
"Sometime in 1990 Roger Cook told me that the [Oz] proposal had not been approved higher-up. Later that year the Berlin Wall came down, and as of a few weeks ago, the U.S.S.R. ceased to exist. I therefore felt it was no longer necessary to keep these files encrypted, and typed them out for addition to my archives."
Sub-series 2.3. Notes, artwork, and other material. 1971-1997, undated.

Sub-series Scope and Content Summary
This sub-series contains notes, correspondence, clippings, outlines, realia, and other material regarding the development and/or publication of Robert L. Forward's science-fiction stories and non-fiction writings. Materials provide contextual information about plot and other story elements, as well as insight into the hard science concepts developed chiefly for Forward's fiction. Many documents contained in this series are heavily copyedited and occasionally autographed. All copyedits and autographs were made by Dr. Forward unless otherwise noted. Bylines are provided exclusively for co-authored works, works by other authors, and works citing more than one creative role. Because many folders maintain the original filing scheme of the creator, select records outside the scope of this sub-series are included.

Sub-series Arrangement
This sub-series is arranged sequentially by box and folder number. Shelved material is listed at the end of the sub-series.

Sub-series Access
Select items in this sub-series are restricted. Access to these materials is subject to approval. Please submit written requests to the Head of Special Collections & Archives.

Sub-series Note on Timemaster
While the bulk of the notes pertaining to Timemaster are explicitly identified as such by Dr. Forward, a small selection of novel-related notes were interfiled with research notes taken by Forward early in his career at Hughes. It is unclear whether or not Forward's notes from the 1960s directly influenced the later concepts used in the book.

Please consult "Sub-series 5.10. Research notes and other material" for the interfiled story notes.

Box 1, Folder 4
Notes regarding Timemaster and other stories (includes photocopies). Issue 150 of Fosfax is also included. 1977-1990.

Box 1, Folder 7

Box 3, Folder 5

Box 3, Folder 6
Correspondence, clippings, and excerpts from scientific publications consulted for Rocheworld. 1972-1982, undated.

Annotation by Robert L. Forward (on separate sheet)
"References I used while writing Rocheworld, including correspondence with Carl Richard Feynman, son of Prof. Richard Feynman."

Box 3, Folder 7
Forms, notes, and other material regarding the stylistic formatting and publication of Flight of the Dragonfly. 1983, undated.

Box 9, Folder 2
Martian Rainbow (Outline of 80,000 word novel). September 1, 1986.

Box 9, Folder 3
Notes, clippings, and other material consulted for the writing of Martian Rainbow. 1979-1988, undated.

Box 9, Folder 5
Notes, drawings, drafts, and other material regarding Rocheworld (includes photocopies). 1979-1983, undated.

Box 9, Folder 6
Excerpts from books written by Robert L. Forward. Includes brief notes regarding the context and inspiration of the works. 1986.

Box 11

Box 12, Folder 2
Chapter outline and notes for the non-fiction work Mirror Matter: Pioneering Antimatter Physics by Robert L. Forward and Joel Davis. undated.

Box 12, Folder 7
Manuscript entitled The World of Dragon's Egg by Robert L. Forward. Includes story abstract and contextual information. undated.

Box 12, Folder 9
Documents regarding the book jacket design and text for Mirror Matter: Pioneering Antimatter Physics by Robert L. Forward and Joel Davis. 1988, undated.


Box 16, Folder 2 Correspondence between Robert L. Forward and Julie Forward Fuller regarding their co-authorship of *Return to Rocheworld* (includes reproductions). Drafts, excerpts, and notes are also included. 1991, undated.


Box 16, Folder 4 Outlines and correspondence regarding the sequels to *Rocheworld*. Documents primarily pertain to character development. 1991, undated.

Box 16, Folder 5 Technical reports (fictional) with copyedits by Robert L. Forward regarding *Rocheworld* scientific data. Includes notes and correspondence between Robert L. Forward and co-author Julie Forward Fuller. 1991, undated.

Box 16, Folder 6 Script for the BBC program *Timelords*, for which Robert L. Forward was Science Consultant. Includes copyedits. 1996.

Box 16, Folder 7 Outline entitled *Lord Over the Darkness (Premise)*. Includes copyedits. April 29, 1990.

Box 16, Folder 8 Outlines and correspondence regarding a hard science-fiction adventure novel entitled *Heaven Must Fall* (includes reproductions). Correspondence is primarily between Robert L. Forward and Robert D. Forward. Includes copyedits. May 7, 1990-February 21, 1991.


Box 18, Folder 1 *The Negative Matter Space Drive*. Concept to be used in a novel. August 9, 1989.


Box 18, Folder 7 Notes regarding *Timemaster*, attached to excerpts from the novel. Includes notes regarding *Lord Over the Darkness*. August 31, 1989-April 28, 1990, undated.


Box 20, Folder 16 Outline entitled *Journey to the Center of the Earth (feature proposal)* written by Bob Forward (Robert D. Forward; reproduction). Includes copyedits. May 2, 1990.

Box 20, Folder 17 Outlines, notes, drafts, and other material regarding science-fiction and science fact projects by Robert L. Forward and others (includes photocopies). Includes copyedits by Robert L. Forward and others. 1971-1982, undated.


Annotation by Robert L. Forward
"Tentative cover for Japanese edition. I rejected it because of scientific inaccuracy."

Box 20, Folder 22 *Timemaster (Outline for a novel)*. Includes copyedits and correspondence from Robert L. Forward to Russell Galen (photocopy). April 19, 1989.

| Box 26, Folder 13 | Outline entitled *Heaven Must Fall* by Robert L. Forward and Robert D. Forward (four drafts). Includes copyedits. February 21, 1991-October 29, 1992. Annotation by Robert L. Forward, 26 September 1992 (on February 21, 1991 draft) "Had a long talk with Rob today, and we decided to try and do this work jointly - 50:50 - If we could get our agents to come up with an equitable solution. Rob called Candy. She felt that under the conditions the various agents, Russ, Candy, & Henry - would come up with an equitable solution. I am to call Russ and get things started. I will write first draft - (after Rob & I have agreed on outline) - Rob will made hero & villain come alive and activate action scenes, and I will do final draft." |
| Box 26, Folder 20 | Outline entitled *Saturn Rukh*. undated. |
| Box 26, Folder 22 | Outline entitled *Prospectus for the Hawke Space Resort*, associated with the story *Heaven Must Fall*. Includes copyedits. undated. |
| Box 27, Folder 8 | Correspondence between Robert L. Forward and David Hartwell, Tor Books, regarding *Timemaster*. Includes pages from the novel with copyedits by Hartwell. circa 1992. |
| Box 27, Folder 15 | Outlines and background story notes regarding *Camelot 30 K* (originally entitled *Camelot Titania*). Includes copyedits. October 26, 1990, undated. |
| Box 28, Folder 5 | Notes, correspondence, excerpts from scientific publications, and other material used as "background notes" for *Camelot 30 K* (includes photocopies). 1989-1992, undated. |
| Box 28, Folder 10 | Notes by Simon & Schuster publishing staff regarding copyediting of *The Flight of the Dragonfly*, originally inserted in manuscript. Includes comments by Robert L. Forward. undated. |
| Box 30, Folder 6 | Outlines (two) and notes regarding *Ocean Under Ice* by Robert L. Forward and Martha Dodson Forward. Includes original outline by Robert L. Forward and Eve Laurel Forward. 1991-1993, undated. |
| Box 32, Folder 13 | Notes labeled "Singing Diamond" (includes photocopies). 1978, undated. |
| Box 32, Folder 22 | Autographed hardback copy of *Saturn Rukh*. 1997. |
| Box 33, Folder 38 | Paperback copy of *Rescued From Paradise* by Robert L. Forward and Julie Forward Fuller. Booklist reviews of the novel are inserted. 1995. |
Guide to the Robert L. Forward papers  MS 175  24

Box 34, Folder 5-6
Outlines, notes, correspondence, and drafts regarding the writing of *Rescued From Paradise* by Robert L. Forward and Julie Forward Fuller (includes reproductions). 1992-1993, undated.

Annotations by Robert L. Forward (on separate sheet)
"Various early drafts and development of Outline, Timeline, and "Bibles" for Aliens in discussions with co-author Julie Forward Fuller.
9 May 1993 - Various rewrites of Outline, Timeline, Wereshark Bible, and Jolly Bible for Julie and I to work toward in writing RESCUED FROM PARADISE."

Box 35, Folder 5-6

Box 36, Folder 10-11

Annotation by Robert L. Forward (on separate sheet)
"Various Drafts of published stories and magazine articles."

Box 39, Folder 3
Audiocassette labeled "Tape #30 / Loscon 9 / 662 - Rocheworld: Slide Show / Dr. Forward discusses his novel. / (EB)." 1982.

Box 39, Folder 3
Audiocassette labeled "Science Fiction Radio Show / Program Number_Crystal Music 1, Paul O. Williams 2-4, Robert Forward 5 / Aired Dec 31 / David Carson - Daryl Lane / Odessa College, TX 79762." 1983.

Box 39, Folder 3
Audiocassette labeled "Science Fiction Radio Show / Forward & Patterson / May 30 - June 3." 1983.

Box 39, Folder 3

Box 39, Folder 3
Audiocassette labeled ""Life on a Neutron Star" / Dr. Robert L. Forward / IguanaCon II. 36th World SF Convention." undated.

Box 39, Folder 3
Audiocassette labeled ""Far Out Physics" / Dr. Robert Forward" (Side 1) and ""Far Out Physics concl." (Side 2). undated.

Box 39, Folder 3

Box 39, Folder 6
Sculpture (clay?) of a Cheela. undated.

Box 40, Folder 2
Paintings on cardboard canvases (four) depicting Cheela, probably by Robert L. Forward. 1979.

On Shelf

Series Scope and Content Summary
This series contains the bulk of Robert L. Forward's personal and professional correspondence. Many of these records were explicitly identified as yearly correspondence files at the time of acquisition, and are in the form of letters, faxes, e-mails, and postcards. Correspondents include colleagues, science-fiction authors, students, fans, business associates, family, and others. Topics primarily pertain to Forward's professional areas of expertise, his scientific and literary careers, and extracurricular projects and programs with which he was involved, such as the Mirror Matter newsletter and The British Interplanetary Society peer-reviewed journal. The majority of post-1980 incoming correspondence contains annotations by Dr. Forward which typically indicate the nature and tenor of his replies.

Due to the papers' arrangement, much of the correspondence is related to Dr. Forward's literary contracts and negotiations, as well as freelance speaking or writing engagements.

For additional correspondence regarding Forward's business endeavors, please consult "Series 1. Official documents."

Because many folders maintain the original filing scheme of the creator, select records outside the scope of this series are included.

Series Arrangement
This series is arranged sequentially by box and folder number.

Series Access
Select items in this series are restricted. Access to these materials is subject to approval. Please submit written requests to the Head of Special Collections & Archives.

Box 12, Folder 8 Correspondence (includes photocopy). 1993-1998, undated.
Box 14, Folder 19 Correspondence (includes reproductions). 1989-1990.

Note on Access
Includes restricted materials.

Box 14, Folder 20 Correspondence (includes photocopies). 1988.
Box 15, Folder 1 Correspondence (includes reproductions). 1992-1993.

Note on Access
Includes restricted materials.


Note on Access
Includes restricted materials.

Box 15, Folder 3 Correspondence (includes reproductions). 1995-1996.

Note on Access
Includes restricted materials.

Box 15, Folder 10 Correspondence. 1992-1993, undated.
Box 19, Folder 4 Correspondence (includes reproductions). 1987-1990.

Note on Access
Includes restricted materials.


Note on Access
Includes restricted materials.

Box 20, Folder 19 Correspondence. 1989-1990.
Box 21, Folder 13 Correspondence (includes reproductions). 1974-2000.
Box 24, Folder 3 Correspondence (includes reproductions). 1989-1991, undated.
| Box 28, Folder 12 | Correspondence (includes reproductions). Notes and drafts regarding *Saturn Rukh* are also included. 1960-1994.  
Note on Access  
Includes restricted materials. |
|---|---|
| Box 28, Folder 13-14 | Correspondence (includes reproductions). Clippings, ephemera, and other material are also included. 1962-1997, undated.  
Note on Access  
Includes restricted materials. |
| Box 28, Folder 15 | Correspondence (includes reproductions). Clippings, ephemera, and other material are also included. 1941-2001, undated.  
Note on Access  
Includes restricted materials. |
| Box 28, Folder 16 | Correspondence (includes reproductions). 1982.  
Note on Access  
Includes restricted materials. |
| Box 28, Folder 17-18 | Correspondence (includes photocopies). 1983.  
Note on Access  
Includes restricted materials. |
| Box 29, Folder 1 | Correspondence (includes reproductions). 1984.  
Note on Access  
Includes restricted materials. |
| Box 29, Folder 2 | Correspondence (includes reproductions). 1985.  
Note on Access  
Includes restricted materials. |
| Box 29, Folder 3 | Correspondence (includes reproductions). 1986.  
Note on Access  
Includes restricted materials. |
| Box 29, Folder 4 | Correspondence (includes reproductions). 1987.  
Note on Access  
Includes restricted materials. |
| Box 29, Folder 5-6 | Correspondence (includes reproductions). 1988.  
Note on Access  
Includes restricted materials. |
| Box 29, Folder 7 | Correspondence (includes reproductions). 1989.  
Note on Access  
Includes restricted materials. |
| Box 29, Folder 8 | Correspondence (includes reproductions). 1990.  
Note on Access  
Includes restricted materials.  
Box 32, Folder 3 | Correspondence (includes reproductions). 1990-1991.  
Note on Access  
Includes restricted materials. |
| Box 32, Folder 5-6 | Correspondence (includes reproductions). 1991.  
Note on Access  
Includes restricted materials. |
|-------------------|--------------------------------------------------|
Box 32, Folder 16 | Correspondence (includes reproductions). 1983-1992, undated.  
Note on Access  
Includes restricted materials. |
| Box 32, Folder 17-18 | Correspondence (includes reproductions). 1982-1994, undated.  
Note on Access  
Includes restricted materials. |
| Box 32, Folder 19 | Correspondence (includes reproductions). 1989-1994, undated.  
Note on Access  
Includes restricted materials. |
| Box 37, Folder 3 | Correspondence (includes photocopies). circa 1984-1988, undated.  
Note on Access  
Includes restricted materials. |
| Box 37, Folder 4 | Correspondence. 1932-1937.  
Box 37, Folder 5 | Correspondence. 1940-1944, undated.  
Box 37, Folder 6 | Correspondence. 1953-1959.  
Box 37, Folder 7 | Correspondence (includes reproductions). 1960.  
Box 37, Folder 8 | Correspondence. 1961.  
Box 37, Folder 9 | Correspondence (includes photocopies). 1962.  
Box 37, Folder 10 | Correspondence (includes photocopies). 1963.  
Box 37, Folder 11 | Correspondence (includes photocopies). 1964.  
Note on Access  
Includes restricted materials. |
| Box 37, Folder 12 | Correspondence. 1965.  
Box 37, Folder 13 | Correspondence (includes photocopies). 1966.  
Box 37, Folder 14 | Correspondence (includes photocopies). 1967.  
Box 37, Folder 15 | Correspondence (includes photocopies). 1968.  
Box 37, Folder 16 | Correspondence (includes photocopies). 1969.  
Box 37, Folder 17 | Correspondence (includes photocopies). 1970.  
Note on Access  
Includes restricted materials. |
| Box 37, Folder 18 | Correspondence (includes photocopies). 1971.  
Box 37, Folder 19 | Correspondence (includes photocopies). 1972.  
Note on Access  
Includes restricted materials. |
| Box 37, Folder 20 | Correspondence (includes photocopies). 1973.  
Box 37, Folder 21 | Correspondence (includes photocopies). 1974.  
Note on Access  
Includes restricted materials. |
| Box 37, Folder 22 | Correspondence (includes photocopies). 1975. |
Box 37, Folder 23  
**Correspondence (includes photocopies). 1976.**

Note on Access
Includes restricted materials.

Box 37, Folder 24  
**Correspondence (includes photocopies). 1977.**

Box 37, Folder 25  
**Correspondence (includes photocopies). 1978.**

Note on Access
Includes restricted materials.

Box 37, Folder 26  
**Correspondence (includes reproductions). 1979.**

Note on Access
Includes restricted materials.

Box 37, Folder 27  
**Correspondence (includes photocopies). 1980.**

Note on Access
Includes restricted materials.

Box 37, Folder 28  
**Correspondence (includes reproductions). 1981.**

Note on Access
Includes restricted materials.

**Series 4. Memorabilia and personal items. circa 1865-2000, undated.**

Series Scope and Content Summary
This series contains publications, clippings, awards, photographs, artwork, and other material collected by Dr. Forward that documents his personal life and professional accomplishments. Publications include popular and academic serials, often featuring articles by or about Forward, as well as programs and other literature produced in conjunction with professional conferences. While select documents may be classified as scientific research, it is evident that the materials in this series were preserved for commemorative, rather than professional, purposes.

*For writings preserved as evidence of Dr. Forward's research, please consult "Series 5. Scientific research."*

Series Arrangement
This series is arranged sequentially by box and folder number. Shelved material is listed at the end of the series.

Box 1, Folder 1  
**Clippings, papers, and other material regarding Robert L. Forward's childhood and personal accomplishments. 1932-1943, undated.**

Box 1, Folder 2-3  
**Black-and-white photographs, color photographs, color slides, and negatives regarding the life and work of Robert L. Forward. Images document Forward's childhood and family, career at Hughes Research Laboratories, and other subjects. circa 1865-1998, undated.**

Box 2, Folder 1-3  
**Clippings, magazines, and other popular publications featuring articles by or about Robert L. Forward, or referencing his work (includes photocopies). 1990-1999.**

Box 5, Folder 3-4,  
Box 6, Folder 1  
**Newsletters, pamphlets, prints, and other ephemera regarding space exploration projects and research, primarily those funded by NASA and managed by the Jet Propulsion Laboratory. circa 1958-1987, undated.**

Box 6, Folder 2  
**Newsletters, pamphlets, prints, and other ephemera regarding the NASA Voyager Mission (includes photocopies). Clippings regarding other topics are also included. 1957-1986, undated.**

Box 6, Folder 3  
**Fliers, pamphlets, and other ephemera regarding science fiction and fantasy literature. Includes National Geographic poster regarding the solar system. 1948-1984, undated.**
<table>
<thead>
<tr>
<th>Box 7, Folder 4-6</th>
<th>Journals, magazines, and other publications (academic and popular) regarding physics, space exploration, and related topics. Select issues feature articles by or about Robert L. Forward, or referencing his work. 1981-1991.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Box 8, Folder 1-2</td>
<td>Journals, magazines, and other publications (academic and popular) regarding physics, space exploration, and related topics. Select issues feature articles by or about Robert L. Forward, or referencing his work. 1962-1990, undated.</td>
</tr>
<tr>
<td>Box 9, Folder 7</td>
<td>Sermons, programs, and notes regarding Robert L. Forward's guest sermons delivered at the Church of the Foothills, a United Church of Christ-Congregational institution. 1968-1982, undated.</td>
</tr>
<tr>
<td>Box 12, Folder 4</td>
<td>Manuscript (untitled), probably a biography of Robert L. Forward. Includes copyedits by Robert L. Forward. undated.</td>
</tr>
<tr>
<td>Box 12, Folder 12</td>
<td>Clippings, conference materials, and other publications featuring articles by or about Robert L. Forward, or referencing his work. 1961-1991, undated.</td>
</tr>
<tr>
<td>Box 13, Folder 12</td>
<td>License plate of Robert L. Forward, personalized &quot;NTRSTLR.&quot; circa 1992.</td>
</tr>
<tr>
<td>Box 18, Folder 12</td>
<td>Clippings and magazines featuring articles by or about Robert L. Forward, or referencing his work (includes photocopies). 1989-1990, undated.</td>
</tr>
<tr>
<td>Box 20, Folder 14</td>
<td>Fliers and other ephemera regarding Robert L. Forward speaking engagements. 1990, undated.</td>
</tr>
<tr>
<td>Box 21, Folder 8</td>
<td>Narrative by Martha Dodson Forward regarding a trip to Japan. Includes note from Robert L. Forward to Shiro Nagano, Governor of Okayama Prefecture (reproduction). 1991.</td>
</tr>
<tr>
<td>Box 21, Folder 9</td>
<td>Note on Access</td>
</tr>
<tr>
<td></td>
<td>Includes restricted materials.</td>
</tr>
<tr>
<td>Box 22, Folder 1-2</td>
<td>Clippings, magazines, and other material featuring articles by or about Robert L. Forward, or referencing his work (includes photocopies). 1986-2000, undated.</td>
</tr>
<tr>
<td>Box 22, Folder 3</td>
<td>Journals, narrative, and other material regarding Robert L. and Martha Dodson Forward's 1979 Scotland trip and Seacon '79 convention (includes photocopies). 1979, undated.</td>
</tr>
<tr>
<td>Box 25, Folder 31</td>
<td>Booklet entitled Executive Summary of The Space Summit: An International Conference on Manned Space Exploration. Includes correspondence and certificate of appreciation from the National Space Club. 1990.</td>
</tr>
<tr>
<td>Box 32, Folder 8</td>
<td>Clippings, fliers, and other ephemera regarding Robert L. Forward's literary works and scientific career (includes reproductions). 1965-1994, undated.</td>
</tr>
<tr>
<td>Box 32, Folder 9</td>
<td>Illustrations by Robert D. Forward and other material (includes photocopies). 1979-1981, undated.</td>
</tr>
<tr>
<td></td>
<td>Annotation by Robert L. Forward, 3 May 2002</td>
</tr>
<tr>
<td></td>
<td>&quot;My son, Robert D. Forward, did these cartoons for me to use as letterheads.&quot;</td>
</tr>
</tbody>
</table>
Box 32, Folder 12  Documents regarding the Aerojet Propulsion Research Institute. 1985, undated.
   Annotation by Robert L. Forward
   "Was interviewed by Dan Raymer to join group. Aerojet dropped plans shortly after."

Box 32, Folder 21  Manuscript entitled *Imagining the Future-Possible* by William G. Doty regarding science-fiction literature (photocopy). undated.

Box 33, Folder 19  Manuscript entitled "*Ad Astra!*" by Ulyana Horodyskyj regarding her admiration of Robert L. Forward. December 2000.
   Annotation by Robert L. Forward
   "A+ writing assignment."

   Annotations by Robert L. Forward
   "Rec. 11/6/89. Returned 6 Nov 1989."


Box 36, Folder 12  Magazines and convention programs featuring articles by or about Robert L. Forward, or referencing his work. 1992-1994.

Box 37, Folder 2  Résumés of Robert L. Forward (includes photocopies). circa 1974, undated.


Box 37, Folder 37-38  Magazines featuring articles by or about Robert L. Forward, or referencing his work. Includes unrelated publications. 1961-1989.

Box 38, Folder 1-2  Magazines featuring articles by or about Robert L. Forward, or referencing his work. Includes material regarding fiction writing and other topics. 1978-1991.

Box 38, Folder 4  Plaque containing the inscription "Icon X Scientist Guest of Honor Dr. Robert L. Forward Presented by the Science Fiction Forum of the State University of New York at Stony Brook April 19-April 21, 1991." April 19-21, 1991.

Box 39, Folder 1  Award (silver rocket on wood base) with inscription "Sixth Space Development Conference "Return to the Vision" May-1987 "Space Pioneer Award" Scientist/Engineer." May 1987.

   Annotation by Robert L. Forward

Box 39, Folder 7-8  Floppy disks (13 items), some labeled. 1993, undated.

Box 40  Certificate with the inscription “Five Cloud Prize / Robert L. Forward, Mr. / Your Dragon's Egg / Translated in Showa 57 / Out of the Many Submitted, the Fans Chose from the Foreign Novels, to Present the Top Prize / A Souvenir is Being Presented / Showa 58 August 21 (1983) / Japan SF Fan Group Conference / Chairman, Kadokura, Junichi" (English translation). Mounted on wood plaque. August 21, 1983.

Box 40  Poem entitled *Dragon's Egg* by V. Pace (handwritten in calligraphic script). Mounted on wood plaque. undated.
Box 40

Box 40, Folder 1

Box 40, Folder 1
Color photograph depicting the entrance to Einstein: A Centenary Exhibition, held at the National Museum of History and Technology in 1979. 1979?

On Shelf


Series Scope and Content Summary
This series represents the oeuvre of Robert L. Forward's scientific work, containing journals, papers, articles, lectures, technical reports, notes, and other material regarding his career as a physicist and consultant. Materials document a variety of topics, including Forward's work at Hughes Research Laboratories, professional publications and research, and consultant services undertaken for separate projects and contracts. While the bulk of the records were created by, or pertain to, Dr. Forward, the intellectual products of other scientists are also included.

Because many folders maintain the original filing scheme of the creator, select records outside the scope of this series are included.

Series Arrangement
This series is arranged into ten sub-series according to genre/format or subject of materials:

Sub-series 5.4. Lectures, seminars, and workshops, 1974-1995, undated.


Sub-series Scope and Content Summary
This sub-series documents the scientific research of Dr. Robert L. Forward that was published in the form of professional, scholarly articles. This includes draft versions of manuscripts, the bulk of which contain copyedits, as well as clippings and copies of published articles. Select academic articles by other scientists are also included. Bylines are provided exclusively for co-authored works, works by other authors, and works citing more than one creative role. All copyedits were made by Robert L. Forward unless otherwise noted.

This sub-series also contains clippings from popular publications regarding the work of Robert L. Forward, which attest to his achievements in the field of science.

For clippings preserved as commemorative items, please consult "Series 4. Memorabilia and personal items."

Sub-series Arrangement
This sub-series is arranged sequentially by box and folder number.

Box 8, Folder 3

Box 8, Folder 5
Box 8, Folder 8


Annotation by Robert L. Forward, 17 Oct 1988

"Trying to cut down paper for publication."

Box 8, Folder 9


Box 8, Folder 10

*Pluto - Doorway to the Stars* by George Peterson Field (manuscript; photocopy). 1961.

Box 8, Folder 11


Box 12, Folder 3


Box 12, Folder 14

Documents, forms, clippings, and other material regarding the writing and publication of scientific articles (includes photocopies). 1984-1986, undated.

Box 13, Folder 1


Box 13, Folder 10


Box 13, Folder 11

*Gravity in Motion* (formerly *Gravity Dynamics*). Includes copyedits. September 4-7, 1982.

Box 14, Folder 1

*Starship History* (four drafts). Includes copyedits. October 7-November 2, 1982.

Box 14, Folder 2


Box 14, Folder 8


Box 14, Folder 10


Box 14, Folder 13


Box 14, Folder 15


Box 16, Folder 9


Box 17, Folder 9


Box 17, Folder 12


Box 19, Folder 5


Box 19, Folder 8


Box 19, Folder 9


Box 20, Folder 1


Box 20, Folder 2

Clippings, manuscripts, and presentation printouts regarding interstellar travel. Includes material by Robert L. Forward, or referencing his work (includes photocopies). 1980-1987, undated.

Box 20, Folder 4


Annotations by Robert L. Forward, 1987

Sinsky and Weber:

"See last paragraph. Weber did not allow mention of my dynamic gravity field work, published before this."

Sinsky:

"Does not mention my dynamic gravitational field work published in 1967."
Box 20, Folder 5  
**Light-Levitated Geostationary Cylindrical Orbits Using Perforated Light Sails**. Includes report and clipping by other authors. 1979-1983.

Box 20, Folder 6  
**Aliens in Our Seas** (two copies). August 11, 1980.

Box 20, Folder 8  
**Spin Drive to the Stars**. Includes photocopies of published article. March 23, 1980.

Box 20, Folder 10  

Box 20, Folder 18  

Box 20, Folder 21  

Box 21, Folder 4  

Box 21, Folder 5  

Box 23, Folder 3  

Box 23, Folder 4  
Correspondence, documents (invention disclosure), reprints, and other material regarding the publication of **Solar Photon Thruster** in the Journal of Spacecraft and Rockets, Vol. 27, No. 4. 1988-1990.

Box 23, Folder 5  
**Nullor Space Drive**. Labeled "Original to Nullor Space Drive." 1990.

Box 23, Folder 7  

Box 23, Folder 8  

Box 24, Folder 1-2  
**Lifetime of a Circularly Symmetric Singly-Crosslinked Multistrand Tether** by Robert L. Forward and Rob Hoyt, **Constant Length Bridging of Cuts in Tether Structures**, and **Comparative Lifetimes of Non-Interconnected Multistrand Tethers**. Appendices A, B, and D for the report **Failsafe Multistrand Tethers for Space Propulsion**. Includes copyedits and notes. 1991-1992, undated.

Box 25, Folder 4  
**Appendix E: Meteoroid and Space Debris Crater Rate Model** by Robert L. Forward and Stan Love (two drafts, probably included in **Failsafe Multistrand Tethers for Space Propulsion**). Includes copyedits and correspondence. 1991-1992.

Box 25, Folder 7  
**Oz Project**. September 12, 1989.

Box 25, Folder 12  
**Mirror Matter** nos. 15 and 16 (drafts). Includes copyedits. 1989.

Box 25, Folder 17  

Box 25, Folder 18  

Box 25, Folder 20  
Box 25, Folder 22  

Box 25, Folder 23  
The Weber Effect Experiments (Appendix C; five drafts). Includes copyedits.  

Box 25, Folder 24  

Box 25, Folder 26  

Box 25, Folder 27  

Box 25, Folder 30  
  Annotation by Robert L. Forward  
"Printed in Analog. Reworking for New Scientist."

Box 25, Folder 33  
  Annotation by Kip S. Thorne  
"Bob Forward, This is a working draft, but it may interest you in connection with Timemaster. Note especially Section 3 & Figure 8. Were you aware that following your idea (Fig 8b) one can get an infinite number of solutions?"
  Annotation by Robert L. Forward  
"My novel, Timemaster, made a major contribution to this scientific paper while the novel was still being written."

Box 26, Folder 6  

Box 26, Folder 16  
  Annotation by Robert L. Forward  
"Feature article for the Annual Yearbook of Science & Technology for Encyclopaedia Britannica."

Box 31, Folder 8-9  

Box 31, Folder 10-11  

Box 32, Folder 15  

Box 33, Folder 10  

Box 33, Folder 14  

Box 33, Folder 15  

Box 33, Folder 16  
Correspondence, notes, and excerpts regarding the publication of Natural Wormholes as Gravitational Lenses by John G. Cramer et al. (includes reproductions). 1994-1995, undated.

Box 33, Folder 17  

Box 33, Folder 25  

Box 33, Folder 28  

Box 33, Folder 31  

Box 33, Folder 31  
Horizon Missions Volume I: Technology Concept Study . Published by the Office of Aeronautics and Space Technology, National Aeronautics and Space Administration, Washington, DC 20546. Includes correspondence from NASA. April 1992.
Box 37, Folder 35  

Box 38, Folder 11  

On Shelf  

Sub-series Scope and Content Summary  
This sub-series is comprised of drafts and reprints of papers presented at, or submitted to, professional conferences. A brief description or summary of the conference, as well as the date and location of the event, is listed on the title page of each document. Occasionally, Dr. Forward also identified the panel or session for which the paper was submitted. Select papers include copyedits, notes, or other documents pertaining to the subsequent revision and publication of the conference paper. All copyedits were made by Dr. Forward.

Sub-series Arrangement  
This sub-series is arranged sequentially by box and folder number.

Box 14, Folder 12  

Box 15, Folder 5  

Box 16, Folder 10  

Box 17, Folder 1  

Box 17, Folder 2  
The Statite: A Spacecraft that Does Not Orbit (four drafts; one abstract). 

Box 17, Folder 3  

Box 17, Folder 5  

Box 17, Folder 7  

Box 17, Folder 10  
Box 17, Folder 10  

Box 18, Folder 10  

Box 18, Folder 11  

Box 20, Folder 15  

Box 25, Folder 14  

Annotation by Robert L. Forward

"Space Warps. Turning AIAA paper into a JBIS publication."

Box 25, Folder 25  

Box 33, Folder 29  

Box 33, Folder 33  

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Sub-series 5.3. **Contract reports and other documents. 1983-2000, undated.**

**Sub-series Scope and Content Summary**

This sub-series contains technical reports, notes, correspondence, drafts, and other material regarding contract projects completed by Robert L. Forward. Dr. Forward typically served as the principal, and sole, investigator for these projects, the bulk of which were sponsored by U.S. government entities. Clients include the Air Force Astronautics Laboratory, NASA, and the Jet Propulsion Laboratory. Project titles and contract numbers are provided when known. Select documents contain copyedits by Robert L. Forward.

Many of the technical writings included here pertain to projects documented elsewhere in the collection. For additional records regarding Robert L. Forward's contractual work, please consult "Series 1. Official documents" and “Sub-series 5.10. Technical writings (bound)."

**Sub-series Arrangement**

This sub-series is arranged sequentially by box and folder number.

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Box 1, Folder 6  

Box 2, Folder 4  
Box 12, Folder 11  

Box 13, Folder 6  

Box 15, Folder 11  
Correspondence, notes (witnessed and dated), drafts, and other material regarding miscellaneous contract projects (includes photocopies). 1983-1993, undated.

Box 19, Folder 6  

Box 21, Folder 12  

Box 23, Folder 9  

Box 25, Folder 3  

Box 25, Folder 29  

Box 29, Folder 11  

Box 33, Folder 8  

Box 33, Folder 11  

Box 33, Folder 22  

Box 33, Folder 24  

Box 33, Folder 37  


Sub-series Scope and Content Summary

This sub-series is comprised of material prepared for, or documenting, lecture, seminar, and workshop presentations given by Robert L. Forward. Formats include transparencies and other visual aids, computer printouts, drawings, notes, drafts, and audiovisual recordings. Materials pertain to science-fiction and hard science topics and events.

Sub-series Arrangement

This sub-series is arranged sequentially by box and folder number.
<table>
<thead>
<tr>
<th>Box 8, Folder 6</th>
<th>Far Out Physics (An Illustrated Lecture) by Dr. Robert L. Forward; illustrations by Robert D. Forward. Originally presented at the Annual Conference of Science Fiction Writers of America, Century Plaza Hotel, Los Angeles, California, 27 April 1974. 1974.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Box 21, Folder 2</td>
<td>Drawings and computer renderings (reproductions) for a presentation on the Starwisp project. Includes copyedits. October 19, 1989, undated.</td>
</tr>
<tr>
<td>Box 39, Folder 3</td>
<td>Audiocassette labeled &quot;Futuristic Propulsion Concepts / UCSD Seminar June 1976 / Part I&quot; (Side A) and &quot;Part II&quot; (Side B). June 1976.</td>
</tr>
</tbody>
</table>

Sub-series Scope and Content Summary
This sub-series contains personal journals maintained by Dr. Robert L. Forward during an eight-year period of his time at Hughes Research Laboratories (1966-1972). While they primarily document daily activities and projects undertaken at Hughes, the earliest journal is described by Dr. Forward as "a separate notebook for professional work outside of Hughes." Dr. Forward inscribed his contact information on the inside cover of each journal and identified the date of his writings on the title page. He began the Hughes journals while an Associate Manager in the Theoretical Studies Department, transitioning to the position of Manager in the Exploratory Studies Department after less than one year. Contents include narrative entries, notes regarding departmental and other meetings at Hughes, and mathematical and scientific equations and diagrams pertaining to projects and experiments.

Sub-series Arrangement
This sub-series is arranged chronologically.

On Shelf
On Shelf
On Shelf
On Shelf
On Shelf
On Shelf
On Shelf
On Shelf
On Shelf
On Shelf


Sub-series Scope and Content Summary
This sub-series contains the papers of Robert L. Forward that were selected for binding in book form by Dr. Forward. The papers are primarily composed of scientific articles, reports, and texts that were published in professional journals, presented at conferences, or prepared for projects at Hughes Research Laboratories. The bulk of the papers have indices listing the individual works featured in the respective volume, as well as the date of publication or authorship. Both single-authored and co-authored works are included. All volumes are bound with the exception of "Papers 1986," which was selected for binding by Dr. Forward but never completed.

Because the records are in original order, select volumes contain materials outside the scope of this sub-series. These are mainly literary works, including copyedited manuscripts and photocopies of published pieces, and copies of Forward's U.S. patents. For descriptions regarding Dr. Forward's literary works, please consult "Series 2. Literary works." For descriptions regarding his U.S. patents, please consult "Series 1. Official documents."

Sub-series Arrangement
This sub-series is arranged chronologically.

On Shelf
On Shelf
On Shelf
"Papers 1963" (includes index). 1963.
On Shelf
"Papers 1964" (includes index). 1964.
On Shelf
"Papers 1965" (includes index). 1965.
On Shelf
On Shelf
On Shelf
"Papers 1968" (includes index). 1968.
On Shelf
On Shelf

On Shelf "Papers 1975" (includes index). 1975.
On Shelf "Papers 1979" (2 volumes; includes index). 1979.
On Shelf "Papers 1981" (2 volumes; includes index). 1981.
On Shelf "Papers 1985" (2 volumes; includes index). 1985.
Box 32, Folder 1-2 "Papers 1986" (includes index). 1986.

Annotation by Robert L. Forward
"ready for binding."

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Sub-series Scope and Content Summary
This sub-series contains manuscripts, correspondence, audiovisual recordings, and other material regarding prospective or extracurricular projects with which Robert L. Forward was involved. These include projects affiliated with Forward's consulting firm, Forward Unlimited, as well as locally and nationally organized science initiatives he contributed to. Audiovisual recordings, in particular, capture Forward's participation as an interviewee for science media projects, including documentaries and radio shows.

Sub-series Arrangement
This sub-series is arranged sequentially by box and folder number.

Box 1, Folder 5 Abstracts, papers, lectures, and other material regarding research projects of Forward Unlimited (includes photocopies). 1989-1990, undated.
Box 19, Folder 7 Documents regarding gravity gradiometer applications to navy problems (photocopies). Based on research conducted at Hughes Research Laboratories. 1972-1976, undated.
Box 38, Folder 6 Videocassette labeled "Future Fantastic - Prog 6 "Weird Science", TX: 09/08/96, VHS NTSC, NO BITC." September 8, 1996.

Annotations by Robert L. Forward [on record covers]
"One or more tracks interview with Dr. Robert L. Forward."

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Guide to the Robert L. Forward papers MS 175 40

Sub-series Scope and Content Summary
This sub-series contains written proposals for various research and experimentation projects in the field of physics, primarily those developed by Robert L. Forward. The bulk of the proposals were prepared for U.S. government entities, including the Department of Defense, Air Force, and National Science Foundation. Select proposals contain copyedits by Forward, or supplementary correspondence and/or other documents. Bylines are provided exclusively for works by other authors.

Sub-series Arrangement
This sub-series is arranged sequentially by box and folder number.

Box 15, Folder 12
Correspondence, proposal, and other documents regarding research on ultracold neutrons and their use for national security operations (photocopies). 1969-1976, undated.

Box 17, Folder 4
Unconventional Neutrino Sensor for Army ASAT Program (draft and final proposal). Includes copyedits. 1990.

Box 17, Folder 11

Box 25, Folder 6

Annotation by Robert L. Forward, 7 April 1992
"Negotiated a version of this. $20,630."

Box 25, Folder 8

Annotation by Robert L. Forward
"Not funded."

Box 25, Folder 9

Box 25, Folder 11

Annotation by Robert L. Forward
"Declined 4 April 1994 - Crowley - Tech Evaluator."

Box 25, Folder 13

Box 25, Folder 28

Box 33, Folder 9
Correspondence, notes, and other material regarding the TSAR proposal of Tethers Unlimited (includes reproductions). 1995.

Box 33, Folder 21

Box 33, Folder 36

Box 37, Folder 34

Box 37, Folder 36

Sub-series Scope and Content Summary
This sub-series contains research notes, correspondence, manuscripts, and other material regarding Robert L. Forward's academic study of physics and the scientific concepts and inventions developed by him over the course of his career. Materials particularly document Forward's work with conceptual, or "exotic," physics and inventions related to interstellar space exploration and antimatter. Records included here are not identified as pertaining to his literary works, though there are exceptions resulting from the existing order of the files.

Sub-series Arrangement
This sub-series is arranged sequentially by box and folder numbers.

Box 9, Folder 8
Manuscripts, excerpts, and report regarding the research of physicists (includes photocopies). Select materials reference or acknowledge the work of Robert L. Forward. 1966-1987, undated.

Box 12, Folder 1
Research notes, bibliography, and other material regarding physics topics. 1988, undated.

Box 12, Folder 13
Research notes and correspondence regarding conceptual physics inventions by Robert L. Forward. 1993, undated.

Box 12, Folder 15-16
Manuscripts, papers, clippings, and other material regarding Robert L. Forward's research of propulsion and interstellar flight and exploration (includes photocopies). 1963-1987, undated.

Box 13, Folder 5

Box 14, Folder 17

Box 15, Folder 6
Research notes regarding interstellar propulsion, light sails, and other conceptual physics topics. Includes concepts developed by Robert L. Forward in collaboration with Freeman J. Dyson. 1983-1987, undated.

Box 18, Folder 8

Box 19, Folder 1
Manuscripts, reprints, clippings, and other material regarding the scientific research of Joseph Weber. Many documents contain inscriptions by Robert L. Forward. 1953-1987, undated.

Box 19, Folder 2
File labeled "Ideas." Includes research notes, manuscripts, forms (invention disclosures), and other material created and accumulated by Robert L. Forward while employed at Hughes Research Laboratories (includes photocopies). 1958-1989, undated.

Annotation by Robert L. Forward, 28 May 1987
"Archivist:
This was my file for wild ideas, thoughts, things to work on later. I retire in 2 1/2 months so later is now. I will pass through this collection, throw out "ideas" that are not mine, copy the few that I might discuss in my present AFAL contract, and let you have the bulk."

Box 19, Folder 3

Box 20, Folder 7

Box 20, Folder 9
Manuscripts, clippings, and excerpts regarding supernovae, interstellar propulsion and travel, and other topics (includes photocopies). 1974-1989, undated.

Box 20, Folder 12

  Annotation by Robert L. Forward
  "Perforated Sails notes needs to be put with manuscripts."

Model (representation) identified as "tether samples." undated.


Research notes and report regarding TSS-2 Hoytether developed by Robert L. Forward and Robert P. Hoyt. 1996.

Audiocassette labeled "Gods Universe (contd on side 2)." undated.

16mm motion picture regarding gravitational radiation research at the University of Maryland. September 25, 1963.
  Annotation by Robert L. Forward
  "16mm Color Work Print taken by BBC on 9-25-63 of University of Maryland Gravitational Radiation Experimental Apparatus. Robert L. Forward, Joseph Weber, David Zipoy, Joel Sinsky, David Hines, Mrs. Brown (sec.)."

Videotape regarding the Weber Bar. undated.
  Annotation by Robert L. Forward
  "Damaged Weber Bar Movie. Damaged sprockets mended by Smithsonian."

Videotape from Hughes Aircraft Company labeled "Electric Damping 2 min 23 sec version, product 3234, copy 1, 10 minutes, 300 feet." June 7, 1978.


Seismographic data graph capturing a 48 hour period. May 13, 1965?
  Annotation by Robert L. Forward, 14 August 1986
  "The data on which my thesis was based. This roll also appears as a bit player in opening scenes of "Dragon's Egg" where it rolls along a table and off onto the floor."


Sub-series Scope and Content Summary
This sub-series contains technical reports, proposals, studies, drafts, and other research-related material selected for binding in book form by Dr. Forward. The contents of each volume chiefly pertain to a common project or research initiative, which Dr. Forward identifies on the volumes' title pages. While the format of these identifications varies, they often include a brief description or summary, date range, or alphanumeric notation for the project. For those select volumes lacking a title proper, descriptive information is taken from other parts of the item.

Dr. Forward served as the Principal Investigator or Manager for the majority of these endeavors, which were projects contracted by Hughes Research Laboratories.

Sub-series Arrangement
This sub-series is arranged chronologically.


On Shelf

On Shelf

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On Shelf

On Shelf
"Rotating Gravity Gradiometer Development Programs." Consists of two volume final report on DARPA/AFGL Rotating Gravity Gradiometer Development program, Sperry/Navy Early Award GGS program, and briefings to SAMSO and DMA. 1977.

On Shelf

On Shelf

On Shelf
"Wideband Gravitational Radiation Antenna Research." Compiled by Dr. Forward "as a "sales brochure" to take along with me on marketing trips." 1978-1979.

On Shelf

On Shelf

On Shelf


Series Scope and Content Summary
This series is comprised of Dr. Forward's collection of science-fiction and non-fiction books by other authors, many of which contain author inscriptions or autographs. The bulk of the texts include brief, inserted notes written by Forward that address his relationship to the author, either as a colleague, advisor, or fan. Dedications or acknowledgements of Forward and his work that appear in a text are also meticulously noted. This information, when available, is transcribed in a supplementary note.

Series Arrangement
This series is arranged alphabetically by publication title.

Box 38, Folder 3
Approach to Infinity by Morris Scott Dollens (two copies). undated.

Box 11

Annotation by Robert L. Forward, 24 Dec 1986 (on inserted paper)
"See page 52. I later sent him my 1962 article on laser-pushed lightsails."
Box 11  

Annotation by Robert L. Forward (on inserted paper)
"See page 15."

Box 11  

Annotation by Author
"Great Times, Bob!"

Annotation by Robert L. Forward (on inserted paper)
"Only book of his I had when he visited Hughes. I had nothing to do with this one. Just hate to see an AC Clarke Autograph lost."

Box 22  

Annotation by Author
"To Bob, in appreciation of your kind assistance and sage advice during the course of my research."

Box 11  

Box 38, Folder 3  

Box 36  

Annotation by Author, 2 December 1994
"Bob - Thank you for helping me with this book. With luck, we'll both enjoy success."

Box 10  

Annotation by Author
"To my colleague Robert Forward, with thanks for many things."

Annotation by Robert L. Forward (on inserted paper)
"Heinlein credits me with an anti-gravity drive in this story and names a spacecraft after me."

Box 11  

Annotation by Author (on inserted paper)
"Dear Bob, Herewith the Clarke Drive (inter alia).
(& see reference!)

Annotation by Robert L. Forward, 24 Dec 1986 (on inserted paper)
"See credit on page 302 for giving him the details on how a black hole space drive might work. I also described how one might look at a black hole under a microscope, which he uses on page 90."

Box 10  

Annotation by Robert L. Forward, 24 Dec 1986 (on inserted paper)
"See dedication."
Box 9

Box 22

Box 9

Box 10

Box 38, Folder 3

Box 10
*Polidštěná Galaxie: Kosmická budoucnost lidstva* by Karel Pacner (Kolumbus series, Sv. 112). Published by Mladá Fronta, Prague. 1987.

Box 10
*Poselství Kosmických Světů* by Karel Pacner (Edice Pyramida series). Published by Panorama, Prague. 1987.

Box 22

Box 11
Box 11  
Proteus Unbound by Charles Sheffield. Published by the New English Library paperbacks. 1989.
Annotation by the Author
"To Bob, with thanks for all the useful suggestions."

Box 9  

Box 11  
Der Regenbogen des Mars by Robert L. Forward (German translation; Bastei Lübbe series). Published by Bastei-Verlag, Cologne. 1992.

Box 11  
Annotation by Robert L. Forward, 24 Dec 1986 (on inserted paper)
"See Afterward page 156 ff. Frenkel offered $250 after originally offering $500 for 5000 words. I told him to give it to Silverberg's SFWA indigent author's fund. He spelled my name wrong on the cover."

Box 10  
Annotation by Author
"To Bob, with thanks for all you're doing to make us an interstellar civilization!"
Annotation by Robert L. Forward, 24 Dec 1986 (on inserted paper)
"I influenced the inclusion of a chapter on interstellar flight. See chapter 13 and index."

Box 10  
Annotation by Editor, 11/4/75
"For Robert L. Forward, with all good wishes."
Annotation by Robert L. Forward (on inserted paper)
"I had nothing to do with this one. Just sent for your disposal."

Box 36  

Box 38, Folder 3  

Box 11  
Annotation by Robert L. Forward, 24 Dec 86 (on inserted paper)
"See page 69 about my gravity wave experiments and 72-73 about their trip up to Malibu. That ultimately resulted in Far Out Physics. I also gave them the idea for the Mote (green laser beam) in God's Eye, the Moties were using my one way laser pushed lightsail."

Box 10  

Box 36  

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