



FINDING AID TO THE CECIL F. WARNER PAPERS 1921-2007

Purdue University Libraries
Virginia Kelly Karnes Archives and Special Collections
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Descriptive Summary

Creator Information Warner, Cecil F., 1915-2005

Title Cecil F. Warner papers

Collection Identifier MSF 498

Date Span 1921-2007, predominant 1940s-2000s

Abstract The papers include artifacts, audiovisual materials,

booklets, books, CD-ROMs, clippings, correspondence, electronic media, publications, report cards, a scrapbook (scanned), textbooks, and miscellaneous materials documenting the professional career of Cecil F. Warner, along with many items from his volunteer activities.

Extent 2.05 cubic feet (4 mss. boxes, 1 small flat box)

Finding Aid Author Mary A. Sego

Languages English

Repository Virginia Kelly Karnes Archives and Special Collections

Research Center, Purdue University Libraries

Administrative Information

Location ASC

Information:

Access Collection is open for research.

Restrictions:

Acquisition Donated by Melda Warner (wife of Cecil F. Warner), April 16, 2007, and

Information: James B. Warner (son of Cecil F. Warner), April 25, 2007

Accession 20070416 **Number:** 20070425

Preferred MSF 498, Cecil F. Warner papers, Karnes Archives and Special

Citation: Collections, Purdue University Libraries

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Notice:

Related **Materials** Information:

e-Archives Cecil Warner scrapbook: http://earchives.lib.purdue.edu/cdm/ref/collection/pufaculty/id/314

Maurice J. Zucrow papers: https://apps.lib.purdue.edu/archon/index.php?p=collections/controlcard&id=999&q=zucrow

Jerry L. Ross Papers: https://apps.lib.purdue.edu/archon/index.php?p=collections/controlcard&id=1629&q=ross

Subjects and Genres

Persons

Warner, Cecil F., 1915-2005 Zucrow, Maurice J., 1899-1975 Ross, Jerry L., 1948-

Organizations

Purdue University. Jet Propulsion Laboratory Aerojet General Corporation

Topics

Purdue University. School of Mechanical Engineering Liquid fueled rocket engines Rocket propulsion Air pollution

Form and Genre Types

Artifacts

Audiovisual materials

Booklets

Books

CD-ROMs

Clippings

Correspondence

Electronic media

Miscellaneous materials

Publications

Report cards

Scrapbook (scanned)

Textbooks

Occupations

Mechanical engineering Professor

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Biography of Cecil F. Warner

Cecil F. Warner was born June 13, 1915 in Parker, Indiana. He attended Tri-State College in Angola, Indiana, earned a Bachelor of Science in Mechanical Engineering from Purdue University in 1939, a Master of Science from Lehigh University in 1942, Bethlehem, PA, and a Ph.D. from Purdue University in 1945.

In 1942 Professor Warner joined the Purdue University School of Mechanical Engineering and retired after nearly 40 years as Professor of M.E. in 1981, but he continued part time until 1996. He was instrumental in developing the Purdue Jet Propulsion Laboratory and pioneered research in liquid fueled rocket engines. Warner initiated courses in rocket propulsion, air pollution, thermodynamics and the internal combustion engine laboratory. Many of his students have made major contributions to industry and the space effort of not only our country but of the world. During two stints at Aerojet General Corporation, he was Project Engineer for Nuclear Rocket and Liquid Rocket Divisions. Warner was a team member instrumental in developing the fuels used in the space shuttle. He authored five texts and numerous articles in his area of expertise. He was active in the American Institute of Astronautics and Aeronautics, and was a member of the American Society of Mechanical Engineers, Sigma Xi, Pi Tau Sigma, and Tau Beta Pi.

Warner was active in the Boy Scouts of America, Kiwanis, Masonic Lodge, Habitat for Humanity, and Home Hospital Thrift Shop. He received numerous civic awards including Scouting's Silver Beaver, The Golden Deed and Good Neighbor Awards during his retirement career of volunteering.

Source:

Memorial booklet, and material among papers

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Collection Description

Scope

The Cecil F. Warner papers (1921-2007; 2.05 cubic feet) document his teaching and research career dedicated to the areas of thermodynamics, fluid mechanics, heat transfer, gas turbines, rocket propulsion and air pollution. The papers also reflect his involvement within the community and countless volunteer hours committed to Boy Scouts, Habitat for Humanity, Kiwanis, First United Methodist Church and Home Hospital.

Types of materials include: artifacts, audiovisual materials, booklets, books, CD-ROMs, clippings, correspondence, electronic media, miscellaneous materials, publications, report cards, scrapbook (scanned), and textbooks. The papers are organized into six series and material is arranged chronologically within each:

Arrangement

- 1. Report Cards and Teaching Contracts, 1921-1939 (0.1 cubic feet). This series contains all of Warner's reports cards from grade 1 through his Purdue University Bachelor of Science degree. Also included are his first teaching contracts from Lehigh University, 1940-1941. Warner's diplomas, certificates of membership and various awards can be seen within the scanned scrapbook located in the e-Archives.
- 2. Correspondence, circa 1935-2007 (0.3 cubic feet). The correspondence is comprised of letters written and received by Warner during his time as a Mechanical Engineering professor at Purdue, letters he received from his son, Jim, and a poem written for Warner by his father. Among the correspondence are letters received from Warner's former students, including astronaut Jerry Ross. Additional correspondence that was in the scrapbook and scanned can be found in the e-Archives.
- **3.** Clippings, Booklets, and Miscellaneous Documents, 1946-2007 (0.4 cubic feet). The clippings, booklets and additional items provide information on Warner's contributions to Purdue University and the Lafayette community. There is also historical information on the Purdue School of Mechanical Engineering, Purdue Thermal Sciences and Propulsion Center, and Aeronautical Engineering at Purdue, and related information.
- **4. Books and Publications, 1940-1998 (0.4 cubic feet).** This series reflects Warner's research in the areas of thermodynamics, fluid mechanics, heat transfer, gas turbines, rocket propulsion, and air pollution. Included is his dissertation, "Heat Transfer Characteristics of Several Liquids;" authored textbook, *Thermodynamic Fundamentals for Engineers/with problems and solutions* (2 editions); two books he co-authored on air pollution; a history of the "Thermal Sciences and Propulsion Center, Purdue University, West Lafayette, Indiana;" and two personal reflections.

- **5. Audio Visual Material, 1939-2006 (0.4 cubic feet).** The audio visual material includes a printed image of the STS-27 crew, inscribed to Cecil & Melda Warner, and signed by the crew (includes his former student, Jerry Ross). There is also a printed image of Warner receiving the Kiwanis Tablet of Honor Award. There are five CD-ROMs that have been electronically processed (consult archivist for use), or the material can be viewed in the "Cecil Warner scrapbook," 1939-2006 in the e-Archives. The electronic media includes; "AIAA Historic Aerospace Site Dedication First Plant of the Aerojet Engineering Corporation," November 15, 2000; "Cecil F. Warner Conference Room," dedication and 90th birthday celebration; "Maurice J. Zucrow Laboratories, Archival & Alumni Photos," circa 1998-2006; and "Cecil Univ. Photog."
- **6. Artifacts, 1938-2006 (0.45 cubic feet).** Included among the artifacts are pins from various professional organizations and from organizations for which Warner volunteered; his Purdue senior class ring; academic hood; and two plaques, "In Memory of Scouter Dr. Cecil F. Warner, 1915-2005," for outdoor Boy Scouts structure (The Learning Center) at Cary Camp, Lafayette, Indiana, and the second plaque which documents Dr. Warner's hours of volunteer service to Home Hospital, Greater Lafayette Health Services (7500 hours).

Descriptive Rules

Describing Archives: A Content Standard

Processing Information

All materials have been housed in polyester sleeves, acid-free folders, and acid-free boxes. All newsprint has been photocopied or scanned and originals retained for display purposes, with photocopies made available for research. The items are in chronological order within each series. The CD-ROMs have undergone digital processing.

DETAILED DESCRIPTION OF THE COLLECTION

Series 1. Report Cards and Teaching Contracts, 1921-1941 (0.1 cubic feet)

Box 1 Report Cards and Teaching Contracts, 1921-1941

Folder

- 1. Randolph County Public Schools, Grades 1 4, 1921-1926
- 2. Randolph County Common Schools (Farmland), Grades 5 8, 1926-1930
- 3. Randolph County High School, Grades 9 12, 1930-1934
- 4. Tri-State College, Angola, Indiana, December 14, 1934 January 6, 1936
- 5. Purdue University, School of Mechanical Engineering, Fall 1936 June 10, 1939
- 6. Teaching contract, Lehigh University, Bethlehem, PA, Instructor in the Department of Mechanical Engineering, September 1, 1940 (for term of 10 months)
- 7. Teaching contract, Lehigh University, Bethlehem, PA, Instructor in the Department of Mechanical Engineering, September 1, 1941 (for term of 10 months)

Series 2. Correspondence, circa 1935-2007

(0.3 cubic feet)

Box 1 Second Half of Box 1 – Correspondence, circa 1935-2007

Folder

- 8. Poem written by Clyde Warner to his son Cecil, on Randolph County Lumber Company letterhead, circa 1935-1939
- 9. Correspondence (most related to Purdue School of Mechanical Engineering), 2002-2005
- 10. Letter from Jerry L. Ross, NASA Astronaut to Professor E. Dan Hirleman, Purdue School of Mechanical Engineering, regarding naming a conference room after Cecil Warner, July 23, 2004 (photocopy)
- 11. Correspondence between Dr. Cecil Warner and his son, Jim Warner, 2004-2005 (includes a letter detailing information about Cecil's family and life events)
- 12. Invitation to the naming of the Cecil F. Warner Conference Room in Chaffee Hall, Maurice J. Zucrow Laboratories, June 10, 2005
- 13. Christmas letter, written by Cecil Warner just prior to his death, attached is Dr. Warner's obituary from the Lafayette *Journal and Courier*, along with a note from his wife, Melda, about his passing, December 10, 2005
- 14. E-mail sent to Warner's friends, after his passing, includes a reply from Jerry Ross, December 13-14, 2005

15. Binder containing correspondence between the Warner family and the Purdue Archives and Special Collections, 2007

Series 3. Clippings, Booklets, and Miscellaneous Documents, 1946-2007

(0.4 cubic feet)

Box 2 Clippings, Booklets, and Miscellaneous Documents, 1946-2007

Folder

- 1. Purdue Engineer, Vol. 42, No. 2, February 1946 (Cecil Warner is featured in "Purdue Personalities," p. 28)
- 2. "EASE/ACCESS Postmission Management Report," has photo of Jerry Ross on cover, and inscribed and signed by Ross, "Cecil You would really like this view!" 1985
- 3. Cargnino, L. T. (1989). Aeronautical Engineering at Purdue University from 1950 to 1960. West Lafayette, IN: School of Aeronautics and Astronautics, Purdue University.
- 4. Program, Purdue Engineering Astronaut Alumnus Award Convocation, September 29, 1989
- 5. "The Horn Tooter," Bulletin of the Exchange Club of Lafayette, Indiana, December 12, 1990 (features an article about Cecil Warner being awarded the Golden Deeds Award, and bio/statement about why he was chosen)
- 6. Vick, C. P.; DeMeis, R. (1990, November). The Soviet Race to the Moon. *Aerospace America*, pp. 22-25.
- 7. Booklet, "Mechanical Engineering at Purdue 1882-1982: 100 Years of Progress," Purdue University, 1992
- 8. "MEmo," newsletter to alumni and friends of Mechanical Engineering, Purdue University, 1995 (cover article on the Thermal Sciences and Propulsion Center includes various mentions of Dr. Warner's contributions to the Center)
- 9. Poster, "Purdue University: Cradle of Astronauts A tribute to Purdue engineers in the U.S. space program," June 1997
- 10. Scott, B. (1999). Faithfully Building Houses: Habitat home to be named after longtime volunteer. *Journal and Courier*, p. unknown (includes photo of Warner, and story about house built in his honor); and Scott, B. (circa 2000). 'A Spiritual Reawakening:' Despite ailments, retirees build homes for needy families. *Journal and Courier*, p. unknown (Warner mentioned several times in article)
- 11. Program, Lafayette Kiwanis Club, "A Celebration of Kiwanians' Concern for Children of the World," Special Recognition of Distinguished Kiwanians, George F. Hixson Fellowship/Tablet of Honor Awards, September 28, 2000 (includes a clipping with photograph of those honored, including Warner)
- 12. Booklet, "Celebration of Heat Transfer," Event Proceedings, School of Mechanical Engineering, April 3-5, 2003 (Professor Warner is featured on p.

95)

- 13. Mayer, K. (2003, November/December). Life beyond Purdue. *Purdue Alumnus*, p. 30. (article features Warner and his retirement activities)
- 14. Biographical data sheet, Cecil Francis Warner, 2004
- 15. Biographical data sheet, Joseph R. "Joe" Tanner, NASA astronaut, June 17, 2005
- 16. "HabiChat," (newsletter for Habitat for Humanity), poem dedicated in memory of Cecil Warner and Orsen Percy, circa 2005-2006
- 17. Lerner, P. (2005, May). NASA'S Fixer-Upper Flies Again. *Popular Science*, pp. 62-114.
- 18. Purdue University *Mechanical Engineering News*, "Cecil F. Warner Conference Named," Spring 2005, p. 4, and sheet, "Cecil F. Warner Room, June 10, 2005"
- 19. Memorial service program, booklet, and obituary, Dr. Cecil Francis Warner, December 10-11, 2005
- 20. Cecil F. Warner's scouting history, January 15, 2006
- 21. Booklet and sheet, "Dedication of Cecil F. Warner Memorial Learning Center," Cary Camp, Lafayette, IN, Boy Scouts of America, April 30, 2006 (includes 6 images of the Center and the event)
- 22. Hawks, K. H. (2006 Spring/Summer). Clean Air: Cecil F. Warner Led the Way: This Purdue alumnus wrote the book on air pollution control. *Impact*, Purdue Mechanical Engineering, newsletter for ME alumni and friends, p. 11.
- 23. Clipping, Scott, B. (2007, January 18) Kiwanis Club's focus on children. Journal and Courier, p. unknown, (includes 2003 image of Cecil Warner); program, Lafayette Kiwanis Club 90th Anniversary Celebration Banquet, January 26, 2007, and clipping, Kriebel, B. (2007, January 27). Kiwanis Club second-oldest in state. Journal and Courier, p. unknown

Series 4. Books and Publications, 1940-1998

(0.4 cubic feet)

Box 3 Books and Publications, 1940-1998

Folder

- 1. Paper, "Star and Cross," by Cecil F. Warner, 1940
- 2. Dissertation, "Heat Transfer Characteristics of Several Liquids," by Cecil Francis Warner, February 1945
- 3. Zucrow, M. J.; Warner, C. F. (1950 September). Application of White Fuming Nitric Acid and Jet-Engine Fuel (AN-F-58) as Rocket Propellants. *Journal of American Rocket Society*, No. 82, pp. 139-150.
- 4. Warner, C. F. (1957). *Thermodynamic Fundamentals for Engineers/with problems and solutions*. Ames, Iowa: Littlefield, Adams & Co. (cover coming off book)
- 5. Warner, C. F. (1966). *Thermodynamic Fundamentals for Engineers/with problems and solutions*. Ames, Iowa: Littlefield, Adams & Co.

- 6. Wark, K.; Warner, C. F. (1976). *Air Pollution: Its Origin and Control.* New York: IEP
- 7. Sermon written and delivered by Cecil Warner, "Miracles," 1988
- 8. Paper, "Thermal Sciences and Propulsion Center, Purdue University, West Lafayette, Indiana," circa 1990s
- 9. Wark, K.; Warner, C. F.; Davis, W. T. (1998). *Air Pollution: Its Origin and Control.* (3rd edition). Menlo Park, California: Addison-Wesley

Series 5. Audio Visual Material, 1939-2006

(0.4 cubic feet)

Box 4 Printed Images, CD-ROMs, Electronic Media, 1939-2006

Folder

- 1. Printed image, crew of STS-27, signed and inscribed, "God's Blessings to Cecil & Melda Warner," by crew, Jerry Ross, Guy Gardner, Hoot Gibson, Bill Shepherd, and Mike Mullane, circa 1988
- 2. Printed image, Cecil Warner receiving the Kiwanis Tablet of Honor Award, and 3 ½ x 5 photograph of Dr. Warner's Tablet of Honor plaque, patch, and booklet from the Kiwanis International Foundation, September 2000
- 3. CD-R, "Cecil Warner scrapbook," also scanned and in Purdue University Libraries e-Archives, 1939-2006 [electronic media]
- 4. CD, AIAA Historic Aerospace Site Dedication First Plant of the Aerojet Engineering Corporation, November 15, 2000 (CD preparation, C. M. Ehresman; graphics by Alecia Wiltgen; Photos, Bill Doggett for AIAA and Tom Sprague) [electronic media, photos on specstaff]
- 5. CD-R, "Cecil F. Warner Conference Room," June 10, 2005 (photographs from dedication and 90th birthday celebration) [electronic media, photos on specstaff]
- 6. CD-R, "Maurice J. Zucrow Laboratories, Archival & Alumni Photos," circa 1998-2006 [electronic media]
- 7. CD-R, "Cecil Univ. Photog.," undated [electronic media]
- 8. Cassette tapes, "Interview Cecil Warner, WBAA, December 1981, on Jet Propulsion etc."
- 9. VHS tape, Thermal Sciences and Propulsion Center, Volume 1: "The Zucrow Years," undated

Series 6. Artifacts, 1938-2006

(0.45 cubic feet)

Box 5 Pins, Doctoral Hood, and Plaques, 1938-2006

Folder

- 1. Tie pin with three fraternity charms attached, 1938-1941
- 2. Dr. Warner's senior class ring from Purdue University, 1939
- 3. Academic hood, circa 1945
- 4. Lapel pin, Mechanical Engineering Centennial, Purdue University, circa 1982
- 5. Tie pin, A.S.E.E. (American Society of Mechanical Engineers)," undated
- 6. Lapel pin, Habitat for Humanity, Lafayette, Indiana, undated
- 7. Saw tie pin, worn at Habitat for Humanity events, undated
- 8. Lapel Pin, Kiwanis International, undated
- 9. Pin, Tablet of Honor, Kiwanis International Foundation, undated
- 10. Plaque, shows Dr. Warner's hours of volunteer service to Home Hospital, Greater Lafayette Health Services (7500 hours), circa 2005
- 11. Plaque, "In Memory of Scouter Dr. Cecil F. Warner, 1915-2005," for outdoor Boy Scouts structure (The Learning Center) at Cary Camp, Lafayette, Indiana, circa 2006