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OSCAR SEAWELL

OCTOBER 2014  
BY SHELLEY PAVLOVSKY  
AND  
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**Biographical Sketch:** Oscar Drumheller Seawell was born in 1923 in Yakima, Washington State, United States of America.

In 1941 Oscar began study at Whitman College in Walla Walla, Washington. Though having a military draft deferment to study physics, in 1943 he enlisted in the U.S. Army. After basic military training he was assigned to the Army Specialized Training Program, studying advanced Civil Engineering at the University of Utah for the 1943-44 school year. As World War II ended he was in the Philippines and Japan, observing war's destruction in those locations. Discharged from the Army in January 1946, he returned to study at Whitman College, where also he worked part-time as an assistant physics laboratory instructor.

In 1947 Oscar received the Bachelor of Science (Hons.) in physics and mathematics from Whitman College. During the 1947-48 school year he took post-graduate civil engineering study at the Massachusetts Institute of Technology in Cambridge, from which in 1948 he received the degree of Master of Science in Civil Engineering. While a General Electric Company employee doing nuclear reactor analyses, in 1950-51 he attended the Oak Ridge School of Reactor Technology for six months. From 1964 to 1970 he took additional nuclear and mechanical engineering classes part-time at Stanford University in Palo Alto, California.

Another part-time activity beginning in 1949 was training as an Officer in the Corps of Engineers, U.S. Army Reserve, rising to the rank of Lieutenant Colonel. While living in the United States (until 1971) the training was during scheduled evenings, weekends and two-week summer camps, plus occasional longer periods of active duty, dealing with duties of a construction engineer, combat engineer company commander, public works and utilities officer, and sanitary engineer. Through correspondence lessons and the final two weeks in residence, in 1974 he earned a Diploma from the U.S. Army Command and General Staff College at Fort Leavenworth, Kansas.

Most of Oscar's full-time working career (1948 to 1989) was as an educator, but he also worked in other streams – initially construction for approximately a year, nuclear engineering for eleven years with emphasis on nuclear reactor design and safety, and systems and operations analyses for five years with emphasis on creating computer simulations as diverse as nuclear reactor transients and governmental wartime interactions.

From 1952 to 1956 Oscar was Assistant Professor of Civil Engineering at the University of Idaho in Moscow, Idaho. There he met Bonnie Scott, and they were married in 1953. In 1956 they moved to the Los Angeles area. There, while working in nuclear engineering for Atomics International and The Marquardt Corporation, he developed and taught a nuclear reactor design extension class for the University of California, Los Angeles, during 1956-57 and 1961-62. In 1964 they moved to Palo Alto, California, where during 1964-65 he taught engineering classes at San Jose State College. He then was employed as Principal Analyst with Computer Usage Development Corporation and as Senior Operations Analyst in the Systems Application Group of Stanford Research Institute.

In 1971 Oscar and his family moved to Regina where he accepted an appointment as Professor of Mechanical Engineering at the University of Saskatchewan, Regina Campus, which in 1974 became the University of Regina. His background was suited to system oriented programs being planned. Also his nuclear engineering experience had included mechanical aspects involving design and safety of nuclear reactor systems. He initiated, coordinated and taught in the new Mechanical Engineering program which was discontinued because of its negative effect on the Saskatoon Campus enrolment.

With the Dean of Engineering Oscar proposed an Industrial Systems Engineering program, which after some delay was accepted. While awaiting the new program he taught basic engineering and graduate classes. His title was changed to Professor of Systems Engineering. For the Industrial Systems Engineering program he planned the class list in coordination with other faculty, recruited new faculty, and coordinated program development. The Industrial Systems Engineering classes were started late in

the 1970s decade. He developed and taught some of the program's new classes while continuing to teach some basic engineering classes of the first two years.

For the American Standards Association in 1960 Oscar was Task Force Chairman on preparation of a general guide outline for nuclear reactor accident analyses. He was Chairman of the Los Angeles Section, American Nuclear Society, during 1963-64. He was Vice-Chairman of the University of Regina Faculty Association Executive Committee in 1975-76 and Chairman in 1976-77, the year a majority of the University faculty voted to become a union. Though personally opposing unionization, as Executive Committee Chairman he signed the papers making the Faculty Association a legal collective bargaining agent (a union). He was the Engineering Curriculum and Program Committee Chairman from 1972 to 1980, the University President's Budget Advisory Committee Chairman in 1979-80, and the Faculty Association Pension and Benefits Committee Chairman in 1988-89. Oscar Seawell retired as Professor Emeritus in 1989 but continued to teach Engineering part-time through 1993. He and his wife Bonnie continue to reside in Regina.

Revised by Oscar Seawell  
November 27, 2014

**Scope and Content:** There are no access restrictions on the material in this collection. The files relate to teaching, professional activities and the writing of Seawell's book: *The Pulse of International War* published in 2012. The material in this collection range in date from 1957 to 2012.

**Custodial History:** This collection was brought to Archives and Special Collections by Professor Oscar Seawell in September 2014.

**Legal Agreement:** The donation agreement is pending.

**Future Accruals:** Future accruals are expected.

**Access Restrictions:** The records in this collection are open to researchers.

**Related Accessions:** Related material may be found in 91-77, 92-16, 92-61, 97-18, 2005-10, 2005-11 2013-11, 2013-20 and 2013-27.

Box 1	Professional Activities	
	American Society for Engineering Education (ASEE)	
1	Section Meeting (includes condensed article)	April 30, 1982
2	Section Meeting Transparencies	April 30, 1982
3	Section Meeting Transparencies (originals)	April 30, 1982
	The Marquardt Corporation	
	Nuclear Reactor Transient Simulation and Analysis	
4	NABE - created computer simulation while employed with Atomics International Division of North American Aviation, where employed 1956-58. Changed in December `1958 to work for the Marquardt Corporation	December 1957, February , March, April, September 1959
5	Transient: MARTRAN (Future)	February, March 1959
6	MARTRAN Ib and II	March, April 1959
7	Transient: MARTRAN Code (General)	February, April 1959
8	Transient: MARTRAN (Derivations)	February, March 1959
9	MARTRAN Runs – Early Ones	March 1959
10	Transient Codes: MARTRAN (Worksheets)	March 1959
11	MARTRAN 704 Planning Sheets for IBM 704 Computer	June, July 1959
12	FASTHEAT (Future)	September 1959
13	NABE A (on FASTHEAT A Code)	September 1959
14	FASTHEAT Derivations	September, October 1959
15	FASTHEAT 6	October, December 1959
16	FASTCOOL 1 With Explanation	May 1960
17	American Nuclear Society Abstract	June 1960
18	TEMPTRAN I (Based on FASTCOOL 1) on IBM 704 Computer	June 1960
19	Transient: Notes for Future Codes	June, July 1960
	Teaching Material	
	Engineering 201 Digital Program (includes Engineering 200 where noted)	
20	Nuclear Reactor Simulation Writeups from former semesters (Winter 1975, Winter 1976) for current potential use – with notes (Engineering 200)	January 1976
21	Data for Seminar and References and Notes. Candu Reactor and Related Information 1977 Fall (Engineering 200 and 201)	September, November 1977
22	Nuclear Reactor Simulation 1977 Fall (Engineering 200)	November 1977
23	Candu Simulations from Prior Semesters (Fall 1977, Fall 1978) – without notes (Engineering 200 and 201)	October -December 1977, November 1978
24	Problems Assigned	November 1977, February and September 1979
25	Analogous Systems 1978 Fall and 1979 Fall	1978 and 1979
26	Candu Simulation and Other Materials 1978 Fall	1978
27	Candu Reactor Simulation – Older Notes	June 1978
28	Nuclear Reactor Projects (for Future Planning)	July 20, 1978
29	Candu Simulation #1 Notes 1978 Fall	October 1978
30	Simulation Details (potentially useful)	October, December 1978, March 1979

	31	Three Digital Simulation Assignments and Data 1979 Fall	November 1978, September, October, November 1979
	32	Candu Reactor Simulation 1978 Fall	October, November 1978
	33	Candu Simulation #2 Notes 1978 Fall	November 1978
	34	Simulations – Marked Copies 1978 Fall	November 1978
	35	Lab Assignment Worksheets- Candu 600 Fuel Element Redesign. 1979 Fall	January 1979
	36	Lectures and Labs on Candu Simulation 1979 Winter	January and February 1979
	37	Exams and Schedule 1979 Winter	February, April 1979
	38	Simulation #2 (data not used, saved for future possible use, and some that were used)	March 1979
Box 2	39	Fuel Temperature Analysis (not taken up yet) 1979 Fall	August 1979
	40	Variations in Nuclear Reactor Simulation Module Selections	August 13, 1979
	41	First Digital Program Assignment – Seawell's Solution	September 1979
	42	First and Second Digital Program - Coolant Analyses in Reactor and Steam Generator 1979 Fall	September, November 1979
	43	Exams 1979 Fall	October, December 1979
	44	Planning for Fall 1980 Digital Programs	December 1979, February – April 1980
	45	First and Second Digital Assignments 1980 Winter	January, February 1980
	46	First Digital Program Solution 1980 Winter	January 10, 1980
	47	Fourth Digital Program 1980 Winter - Optional	March, April 1980
	48	Lectures to be Given	January 1980
	49	Third Digital Program -1980 Winter	March 1980
	50	Third Digital Program - Lectures	February, March, April 1980
	51	Third Digital Program - Miscellaneous Notes and Lectures	February 1980
	52	Third Digital Program - Problem and Solution 1980 Winter	March 1980
	53	Third Digital Program - Programming 1980 Winter	February 20, 1980
	54	Third Digital Program - Symbol Lists 1980 Winter	February 1980
Writing by Oscar Seawell			
	The Pulse of International War		
	55	Appendix E - 1946 - 2000 Data	March, April, May 1999
	56	Appendix E (current) Cook and Tillema copies	November 1998, February, March 1999
	57	Appendix E Calculation of International Battle Index 1946 - 2000 by Oscar Seawell	October 1998
	58	Appendix E Graphs 1946 - 2000	November 1998
	59	Appendix E Items to Check in Library re: Wars After World War II	November 23, 1998
	60	Appendix E War Index Data and Graph and Criteria	October, November 1998
	61	Appendix E War Statistics 1946 - 2000 Printouts (outdated early draft)	1998
	62	Chapter 1 - Wheeler and His Index (copy 2)	February, March 2005

	63	Chapter 2 - A Comparative Index from Clodfelter's Record of 16 <sup>th</sup> and 17 <sup>th</sup> Centuries (copy 3) (no draft changes)	November 21, 2006, July 2007
	64	Chapter 5 (Formerly Chapter 4) - International War Index and Peak International Warfare (originals)	2001 - 2006
	65	Chapter 5 - Pages of a Potential 3 <sup>rd</sup> Copy (no draft changes)	October 8, 2007
	66	Chapter 8 - Long Cycle Analysis (copy 3) Completed June 22, 2006 (single spaced)	November 2005, 2006
	67	Chapter 9 - Warfare Level Patterns Within Four Long Cycles (copy 3) (outdated) (Updated copy 1 completed October 2, 2007)	July 2006,
	68	Chapter 10 - Linking and Modifying Dewey's Long Cycles (no draft changes)	July 23, 2006
	69	Chapter 11 - Dewey's 22-Year Cycle Interrelated With Long Cycles (copy 3) (double-spaced)	August 2006, July 22, 2007
	70	Chapter 11 (draft) (older copies) 22-Year Cycle	March 2002, March, April, May 2003
	71	Chapter 12 (draft) Sawtooth Model Combining 22-Year and Long Cycles	December 2002, February, March 2003, January, February, November 2004
	72	Chapter 12 (draft) Sawtooth Model Combining 22-Year and Long Cycles	February, March, December 2003, January 2004,
	73	Chapters 12 and 14 - changes for revisions	February 2003
	74	Chapter 13 (draft) Modified 22-Year Cycle	January, February, March 2003
	75	Chapter 13 (draft, single spaced) Modified 22-Year Cycle	January 2002, September 2006
	76	Chapter 14 (draft, former copy 2)	September 2006
	77	Chapter 16 extra sheets for Hedges quotes (not used in book)	n.d.
	78	Chapter 16 (drafts) Projecting Into the 21 <sup>st</sup> Century	May 2006, April, May, July 2007
	79	Chapter 16 - Projecting into the 21 <sup>st</sup> Century (copy 3) (no draft changes)	July 2007
	80	Chapter 18 (Former 17) - Why the Pulse of International War? (copy 3) (updated September 23, 2007) (no draft changes)	October 2006, September 2007
	81	Draft 2000	September 1999
	82	Graphs	1998, 1999
	83	Notes (old) from planning and calculating	July 1999
	84	Outline, List of Poems (without appendices) (includes volume planning) (no draft changes)	April, May, July, August 2006
	85	Preface (draft)	October 2004
	86	Table 15.6. Trial Copies (outdated) (no draft changes)	March 16, 2007
		Alex MacDonald and Other Contacts	
Box 3	87	Alex MacDonald Copy of Seawell's Material	June 1998
	88	Alex MacDonald Drafts and Outlines	June, August 1998
	89	Notes from Discussions Concerning Pulse of War Joint Book effort with Alex MacDonald	June, October, November 1998
	90	Reflections Chapter Notes Re: Dennis Chisholm's Experience with SS Troops	November, 1999 - January, November 2000
		Clodfelter, Norton, Journal-World - Permissions and Correspondence	
	91	Anchor Books and Chris Hedges (no permission given)	January 2004
	92	Barbara Tuchman Permission Request	February 2004

93	Clodfelter Permission and Correspondence	April 1999, May 2002, March 2004, April 2005
94	Clodfelter, Tillema, and Hutchinson Reference Articles Used in Book	n.d.
95	Facts on File - Chris Cook Request for Permission and Response	November 1998, March, May 1999
96	Kansas City Star and Times (not quoting)	2007, January 2008
97	The Lawrence Journal-World Permission Request	December 2007, January 2008
98	Norton - Letter to Norton re: Cohen Permission Received	January, February, April 2004
	Computer Simulation of War Using a Nuclear Reactor Analogy for War Cycling (old files)	
99	Drawing Techniques for Figures and Nudge Object	January 25, 2000
100	Equations and Spreadsheet for War Cycle Simulation	November, December 1998
101	Individual Graph Notes	October 1998
102	Microsoft Excel Technical Support Contacts	November 1999
103	Simulation Model for War Cycles	November 1998
	Foundation for the Study of Cycles	
104	Correspondence	October 8, 1980
105	Dewey Biography Used for References	1977, August 2000
106	Dewey's Correspondence	July – October 1975, 1979
107	Dewey and Mandino - Books on Cycles	1971
108	Seawell's Pages Printed to Send	May 14, 2004
	Historical References	
109	Clippings and Publications (includes: <i>National Post</i> , 25 Aug. 2001, pages B9-B10, August 2001; Kennedy, David M. "Crossing the Moral Threshold: Why U.S. Leaders Never Questioned the Idea of Dropping the Bomb", <i>Time</i> , 1 Aug 2005, page 24, August 2005; "Rain of Fire", <i>Time</i> , 1 Aug 2005, pages 18-19, August 2005; Dyer, Gwynne. "Young Men Can No Longer Be Our Primary Sacrifice", <i>The Leader-Post</i> , 14 Mar 1983, page A6, March 1983; <i>The Saskatchewan Anglican</i> , March 1991, pages 3-4, March 1991; <i>Anglican Journal</i> , January 2005, pages 17-18, January 2005; <i>The Leader-Post</i> , 31 May 2004, pages B1-B2, B7-B8, May 2004; <i>MIT Technology Review</i> , November/December 2000, pages 8-9, November, December 2000; <i>Time</i> , Canadian Edition, Vol. 166, No. 5, 1 Aug. 2005; <i>The Leader-Post</i> , 15 May 2004, pages G7-G8, May 2004; <i>The Leader-Post</i> , 22 May 2004, pages F11-F12, May 2004; Map - <i>The Balkans/Plight of the Refugees</i> , National Geographic Society, Washington, D.C., 2000; Map - <i>Heart of the Middle East/In Focus: Middle East - Crossroads of Faith and Conflict</i> , National Geographic Society, Washington, D.C., 2002; Almanac of World History, November 2004; <i>National Geographic</i> , Vol. 197, No. 3, March 2000	
110	Crusades	March 2000
111	International War Cycles. Anita Kemp and Seawell's notes for use in Chapter 16	August 2000
112	National Geographic Magazine - Exploration	1998

	113	Oliver North and How United States (U.S.) Government Works, and Other Nation's Systems; The United States (U.S.) Armed Forces	August 1987
	114	<i>Time</i> , Canadian Edition, Vol. 154, No. 10.	September 1999
	115	United States (U.S.) Civil War (includes <i>U.S. News</i> )	August 15, 1988
	116	United States (U.S.) Military	July 2005
	117	Wheeler's Index of International War and Civil War	1970, 2000, 2002
	118	Westview Press re: Use of Tillema Data	March 1999
	119	World History	January 2000
		Man in Conflict Series - University of Regina	
	120	Notes for Man in Conflict Series Lecture in St. Louis re: Long-term War Cycles	1975
		Nuclear War Articles	
	121	Nuclear War and Other Doomsday Scenarios	March 2000, September 2002
	122	Teller, Edward (Doomsday Scenarios)	November 1961
		Poems - Extra Copies / Publisher Information and Expired Permissions Contract	
	123	Contract Signed and Sent to New Directions Publishing Corporation	October, December 1999, February, March 2000, January, February 2001
	124	Permission Request Copies re: Poems	1999, 2000
	125	Poems of Potential Interest re: Book	October 2000, August 2001, July, August, November 2007
	126	Poems of Wilfred Owen	December 1999, July 2000
	127	Publisher Addresses re: Poems	October 1999
		Poems and Poets	
	128	Printed Poems - Used and Not Used; Book Outline - Drafts	2000 - 2007
		Request for Review	
	129	Carter, James (Former President of United States)	May 2003
		Theories of War and Art of War	
	130	Articles about Cycles and War	1973, 1988, 2009
Box 4	131	Blank Forms for War Tabulation	n.d.
	132	<i>A Study of War</i> by Quincy Wright	October 1999
		Wheeler - Survey of His Writing	
	133	Personal Information, Newspaper Articles and Articles written by Wheeler, Raymond	1937, 1946, 1950, 1978 1978
	134	University of Kansas - Correspondence and Meeting Notes re: Wheeler's Data	May 1974, June, July 1978, August 1979
	135	Wheeler's and Other Articles on War and Cycle	1978
		<i>The Pulse of International War</i>	
	136	Appendix B (Outdated) (copy 2)	n.d.
	137	Appendix (Formerly F) with detailed information on 16 <sup>th</sup> and 17 <sup>th</sup> Century Battles	n.d.
	138	Appendix (Formerly F) with detailed 16 <sup>th</sup> and 17 <sup>th</sup> Century Battle Counts used within Tables 2.3 and 2.4	July 2007
	139	Appendix (Formerly F) with detailed 1944 battle count used within Tables 15.2 and 15.3	September, October 2004, February 2005



140	Chapter 15 (Draft, one-sided copies) having additional detail on 1944 Battles	February 2008
141	Chapter 16 (Formerly 15) (draft, single-spaced) Conflicts after World War II	March, April 2007
142	Chapter 15 (Former) 1944 with 38 more pages of narrative description not included in published book in order to shorten presentation	February 2008
	<i>The Pulse of International War</i> for Book 2	
143	An Appendix (Formerly E) (draft) International Battles and Battle Counts during 1944 (incomplete)	October, November 2005
144	An Appendix (Formerly E) 1944 Battles (expanded but not published) (copy 2)	November 2005
145	Chapter 1944 – To Go in Book 2	October, November 2005
146	Chapter on World War II Final Year 1945 (not written)	n.d.
147	Tables - World War II Peak Year 1944 (draft)	July, September, October 2005
148	Seawell's 1998 Information about the Publication, and Revised File Names	2008
	Walsh, Mary Archer	
149	Comparison of Major International Warfare Peaks 1973, Seawell's notes 2012	1973, 2012
150	History of Cycles - 1st Round 1/2	June 1973
151	History of Cycles - 1st Round 2/2	August 1973
152	History of Cycles - 2nd Round	August 1973
	Wheeler and Climate	
153	Cycles Information, Miscellaneous	July 1981
154	Data Analyses	April 6, 1978
155	Journal of Interdisciplinary Cycle Research	n.d.
156	Sunspot Cycles	February 2003
157	Sun-Weather Relationships	December 2002
158	Wheeler's Articles on Effect of Climate on Human Behavior in History, and Related Materials	1978, 1979
159	Wheeler War and Climate	June 28, 1978