

TAPE 5 SIDE A

<u>Counter</u>	<u>Subjects discussed</u>	<u>Names</u>
010	Subject of book, differing opinions on a topic where each sounds logical but are totally opposite, has looked at several common problems & also people's characteristics	
055	Explained origin of Oregon Graduate Institute, was on a fundraising group	
065		Howard Vollum
080	Helped PSU with extra money for "Business Associates", was president early on, has membership fees & some times asked for big bucks, paid for study room in School of Bus. Adm., his name is on it	
101		Jean ^{Ave/} OWT
101	Worked for Norm at TEK, at anthropology dept. at OSU, DNA analysis	
122	Native American Indians divide into 20+ tribal language groups or really only 5, DNA studies support 5	Jean ^{Ave/} OWT
133		
150	Norm successfully bid (at auction) to fund room for a DNA lab, \$7500 or \$10,000	
168	Joined group at Oregon Coast Aquarium after initially established, helped to raise some \$	
175	Also raised \$ for OES	
198	His philanthropic nature does not come from a family ambiance, rather copied what he saw in	
200		Howard Vollum
214	Move to Oregon coast, purchased home of	
221		Mark Hatfield
228	Retirement begins about 1989	
259	In early 1980s had been on OMSI board	
270	Urged by friends to become a gubernatorial contender, considered it, then bowed to Neil Goldschmidt	
325	Asked to join State Advisory Board for Aeronautics by	
327		Betsy Johnson
328	Explains mission of board, need for planes during emergencies, his role on board	
350	Importance of access to airport for economic development of community, cites several examples	
380	Economic & business understanding of the new money scene	

END OF TAPE 5, SIDE A

TAPE 5 SIDE B

<u>Counter</u>	<u>Subject discussed</u>	<u>Names</u>
014		Betsy Johnson
036		Clyde Fryer
037	Optical Data Inc. (no longer exists) to develop an audio CD that can be rewritten, but had limited number of rewrites	
062	Somewhat sarcastic commentary about venture capitalists vs technical idea oriented entrepreneur	
100		Hiro Muragosso
100	HM was president/founder of Zeeland (no longer exists)	
124	Made an instrument that could characterize the electrical parameters of semi-conductors at very high speed, HM's limited capabilities in English a big hindrance	
156	Spectronics (still exists) to measure very small distances or thicknesses without touching object, used to measure cold-rolled steel, rubber, paper, chewing gum wrapper, distance between turbine blade and casing	
203	Hydro Catalysis Power Corp. has small effective value, defines this	
221		Dr. Randy Mills
222	Mills has theory about quantum mechanics at subatomic levels, discussion of Newtonian mechanics, orbit levels of atoms, release of energy as electrons move to lower numbered orbits, existence of 1/2, 1/3, 1/4 levels, moving to these fractional levels releases huge amount of energy, would replace fossil fuels & existing nuclear power, Hydrino=new hydrogen atom whose ash is non-polluting, Hydro Catalysis would produce this making Mills very rich	
305	Norm's big thrill comes from seeing people making good careers, improving a product, helping society, advancing economic development	
333	Would have to work in business field now, he is technically obsolete	
345	Helping young people get good ideas to market is fun	
355	For example	Jerry Pratt, Bob Carter, Milt Smith
	at Thrustmaster	
378	Effort to resuscitate Lattice was FUN.	

END OF TAPE 5, SIDE B

END OF WINNINGSTAD HI-TECH ORAL HISTORY INTERVIEWS

HISTORY OF THE INTERVIEW

C. Norman Winningstad, 1996

There was a genuine interest on part of the staff at the Historical Society to revive the Oral History Program that had been so successful during 1978. Barbara Doyle met Norm Winningstad at an Oregon Pilot's Association dinner on 2 February 1996. A brief discussion about the Historical Society, our interest in oral history interviews and a priority interest in obtaining information about the hi-tech industries led to an exchange of business cards and an agreement by Norm to be interviewed by B. Doyle. Norm was very receptive, tried to fax (on Sunday, 4 February) info about time and place for the meeting. Within a week, time and place for the interview were determined.

Instead of one session, there were five one-hour sessions spread over approximately eleven weeks, all held at the Winningstad's condo in the Sylvan area. Norm was sent (via fax) a list of topics prior to the sessions. He followed the list quite well, provided extremely good explanations of technical topics, showed himself to be a "tech-weenie" (his words) with a wide range of intellectual, business and scientific interests. Norm is very articulate, has good concentration skills and is able to return to his statement at precisely the point where he left off (there were only a few interruptions). The interview topics generally follow the actual sequence of events. The collapse of Floating Point Systems and Norm's minor business interests are the major digressions from a straight chronology.

He understands his position as both a minor venture capitalist and a community philanthropist - there is a need to put up some of his own money if he wants to draw other people into a project. His interests have varied from hi-tech to brand new products, to academic support, to major support of the arts. While not really a life interview, this series certainly goes beyond just Norm Winningstad's place in the development of the hi-tech industries of Washington County.

All duplication and indexing of the tapes was done by Barbara Doyle. Index was proof-read by Norm Winningstad.

Some specifics concerning Norm Winningstad interviews

Time period covered:	overall;	1925 - 1996
	hi-tech in Oregon;	1957-1996

Names mentioned:

A. <u>Businesses/Schools</u>	B. <u>Last names</u>
Control Data Corp.	Anderson
Cray Computer	Auel
Dean Witter	Bouton
Digital Equipment	Carter
Floating Point Systems	Castles
General Electric	Culler
Goldman Sachs	Fryer
Hewlett-Packard	Hatfield
Hughes	Hoffman
Hydro Catalysis Power	Johnson
Lattice Semiconductor	Lawrence
Lawrence Berkeley Labs	McCutcheon
Mentor Graphics	Merlo
Optical Data Inc.	Mills
OR Coast Aquarium	Moriyasu
OR Episcopal School (OES)	O'Leary
OR Graduate Institute (OGI)	Oliver
OR Museum Science/Industry	Pratt
OR State Univ. (OSU)	Prince
Performing Arts Center (PAC)	Rahsneesh
Portland Art Museum	Ropiquet
Portland State Univ. (PSU)	Salquist
Seiko	Saud
Spectronics	Segrey
Star Technologies	Smith
Tektronix	Tsui
Thrustmaster	Turner
Tyres Heart Theatre	Vollum
Univ. Cal.- Berkeley	Wantland
Wildlife Safari	
Zeeland	