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A Conference on the Future of Alaska – Eberhard

Summary created by: Jacob Metoxen

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Notes: Original on 7 inch reel. Master copy on CD.

The recording starts with Eberhard discussing 4,000 people working in the National Bureau of Standards, since it is responsible for fundamental measurements such as time and temperature. He says up until 1958, the only way we could accurately measure time was to about 9 decimal points. He says although that is more accurate than anyone will ever need, it was crucial in sending someone to the moon because of the formula of distances times time as a guidance formula. He says the decimal point had to be moved from .9 to .012. What had to change was the process of physics by which time was measured. Time is now measured by the oscillation of electrons within an atom. We can now measure time to thirteen decimal points. He says the atomic clock in the National Bureau of Standards Laboratory in Boulder, Colorado measures time accurately enough that it is within 3 seconds in 10,000 years. That is not good enough because they are in the process of trying to get to .14. 90% of the federal R and D budget for the past 15 years has gone into weapons, space systems, and atomic energy. The budget for the Department of Housing and Urban Development is \$10 million. Eberhard says if Ed Eberhard, John Osman, and himself were given permission to spend a thousand dollars today, a year from today they would have spent \$1 million dollars. Eberhard says the United States spent \$10 million to improve cities last year. He also says that the United States spent \$10 million on peanut research in the Department of Agriculture 3 years ago. He says Alaska must start investing in research. Eberhard says he is going to give the six basic steps to a systems approach. The first step is to state the problem. The second step is to develop alternative solutions. The third step is to develop evaluation techniques. The fourth step is to evaluate the alternatives against the test methods to decide which alternative works the best. The fifth step is to implement the solution. The sixth step is feedback or evaluation. He says if we look at building in the United States, we can see that the process is non-systematic. Eberhard subsequently elaborates further on each step.

At 8:55 Eberhard discusses the measurements we don't have to measure, humans sociologically and physiologically. He says we can measure temperature, but we cannot measure whether or not that temperature is comfortable as easily. Eberhard asks the crowd if they remember about two years ago when one of the launches at Cape Kennedy was stopped at A-9 and counting. Eberhard says Alaska must work on positive changes in the processes instead of trying to develop better products. We must improve labor intensive processes to make them more efficient. He says there needs to be new capital intensive processes. He says there must be a fostering of intelligence processes. He tells the crowd that if this is the way they want to approach in building up Alaska, he wants to suggest four different ways of organizing to make the plan work. The first is to establish an Office of Science and Technology within

the Executive Branch of the government. He gives the company DuPont as an example. He says petroleum may become difficult for people to tolerate if there are no solutions for pollution. Eberhard discusses the cellulose content of trees to create building material. The second is the Alaskan Advanced Urban Systems Administration. It is based on a project he and his university [the State University of New York at Buffalo] have with the city of Albuquerque, New Mexico. The city will organize itself as a market for the procurement of the advance of urban systems. He describes the General Electric Company and developing new wastes to dispose of waste. The AAUSA would be created for the procurement of urban systems for the whole of the state. The third is the Alaskan Urban systems Development Corporation. The model is in the state of New York, something called the Urban Development Corporation in the State of New York was created by the State of York Legislature two years prior. Ed Logue is the president and the company has the authority to acquire land, develop land, give contracts to industry, retaining professionals, and actually building cities. One of the programs Eberhard is involved in is a program in which there will be 25 new cities built in the state of New York by the end of the century. Each city will be measured in a way so the group can figure out what worked and what didn't. The fourth organization is the Alaskan Community Organization, modeled after the COMSAT Corporation. The Alaskan Community Corporation would be a corporation that issued stock. The corporation would manage the installation and ownership of urban systems.

At 28:25 Eberhard says he is always accused of being a technocrat so he is going to repeat what he said at the beginning. He says the purpose isn't for a few people to make a lot of money, but man and his needs. He ends with a quotation that he says reflects his feeling. The quote is about humans and is by Robert Louis Stevenson. There is clapping and the recording ends.