



Smithsonian Institution Archives

New United Motor Manufacturing  
Videohistory Collection, 1990

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Smithsonian Institution Archives  
Washington, D.C.  
Contact us at [osiaref@si.edu](mailto:osiaref@si.edu)

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## Collection Overview

<b>Repository:</b>	Smithsonian Institution Archives, Washington, D.C., <a href="mailto:osiaref@si.edu">osiaref@si.edu</a>
<b>Title:</b>	New United Motor Manufacturing Videohistory Collection
<b>Identifier:</b>	Record Unit 9550
<b>Date:</b>	1990
<b>Extent:</b>	3 videotapes (Reference copies). 6 digital .wmv files and .rm files (Reference copies).
<b>Creator::</b>	
<b>Language:</b>	English

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## Administrative Information

### Preferred Citation

Smithsonian Institution Archives, Record Unit 9550, New United Motor Manufacturing Videohistory Collection

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## Historical Note

In an effort to regain some of their share of the domestic market for automobiles, in the 1980s American car manufacturers embarked on a variety of reforms of manufacturing processes and management techniques. In February 1983 General Motors (GM) Corporation entered into a joint venture with Toyota to produce automobiles using Japanese management techniques at a GM plant in Fremont, California. The plant was, at the time, the least productive in the GM system. The combined corporate effort, known as New United Motors Manufacturing, or NUMMI, opened for production in December 1984. Within five years the plant operated as efficiently as Japanese manufacturing facilities.

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## Introduction

The Smithsonian Videohistory Program, funded by the Alfred P. Sloan Foundation from 1986 until 1992, used video in historical research. Additional collections have been added since the grant project ended. Videohistory uses the video camera as a historical research tool to record moving visual information. Video works best in historical research when recording people at work in environments, explaining artifacts, demonstrating process, or in group discussion. The experimental program recorded projects that reflected the Institution's concern with the conduct of contemporary science and technology.

Smithsonian historians participated in the program to document visual aspects of their on-going historical research. Projects covered topics in the physical and biological sciences as well as in technological design and manufacture. To capture site, process, and interaction most effectively, projects were taped in offices, factories, quarries, laboratories, observatories, and museums. Resulting footage was duplicated,

transcribed, and deposited in the Smithsonian Institution Archives for scholarship, education, and exhibition. The collection is open to qualified researchers.

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## Descriptive Entry

Peter Liebhold, museum specialist in engineering and industry at the Smithsonian's National Museum of American History (NMAH), toured the NUMMI factory and its production lines to document the mechanical applications of Japanese managerial philosophy. Liebhold surveyed increases in automation, the "just-in-time" inventory system, assembly line quality control through *kaizen*, and the emphasis on teamwork which relied on multi-skilled workers cooperating with managers. These policies differed sharply from traditional American approaches to management and production.

Liebhold interviewed several employees throughout the plant for their responses to the organizational changes. Among those interviewed were Michael Damer, NUMMI's public relation officer, Gary L. Convis, the senior vice-president for manufacturing and engineering, and George Nano, the NUMMI United Auto Workers (UAW) bargaining committee chairman. The interviews took place in a single session, which was recorded on September 25 and 26, 1990 at the NUMMI plant.

This collection consists of one interview session, totalling approximately 6:00 hours of recordings and 109 pages of transcript.

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## Names and Subject Terms

This collection is indexed in the online catalog of the Smithsonian Institution under the following terms:

Subjects:

- Automobile factories
- Engineering
- Industrial efficiency
- Industrial management -- Employee participation
- Industrial management -- Japan
- Industrial management -- United States
- Industrial productivity
- Interviews
- Manufacturing processes
- Oral history
- Science -- History
- Technology -- History

Types of Materials:

- Transcripts
- Videotapes

Names:

- Convis, Gary L.
- Danner, Michael
- General Motors Corporation
- International Union, United Automobile Workers of America (CIO)
- Liebhold, Peter, interviewer

Nano, George  
New United Motor Manufacturing  
Toyota Jidōsha Kabushiki Kaisha

Geographic Names:

Fremont (Calif.)

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## Container Listing

### Interviews

Interviews

#### **Session 1: September 25-26, 1990**

Interviews

At the NUMMI plant in Fremont, California, Liebhold interviewed employees about management style and the process of automobile manufacturing at the plant, c. 1983-1990, including: Line operation improvements based on *kaizen* and suggestion procedures; quality control methods, including *andon* board; responsibilities of teams in production; task definition and assignment; differences between NUMMI and other manufacturers; elimination of job classifications; "just-in-time" inventory control; role of United Auto Workers (UAW) local union; attitudes of local UAW leadership; conflict between pressures for quality and production; physical stress on line workers; training workers to NUMMI philosophy; worker opinions of NUMMI methods; comparisons of NUMMI plant to former GM plant; *kanban* card for inventory control; *andon* board and problem resolution; job descriptions; and women's experiences in factory environment. Visual documentation included: Door panel stamping; die storage; quality information boards; downtime clocks and *andon* board; welding robots; work force in lunchroom; door construction and installation; refurbishment of welding tips; engine dress-up line; car-assembly manifest; *kanban* card for inventory control; Standardized Work Combination Table; problem resolution by team during line stoppage; exterior of NUMMI plant; group attendance chart; "Christine" seat installation robot; final assembly line work; spare tire robot; and molding and trim application.

Interviews

Transcript, 1-109 pages, of videotape recording, 6 hours.

Interviews

Video Recordings of Interview: Total Recording Time: 6 hours

Note:

- Original Masters: 18 Beta videotapes
- Preservation Masters: 18 Motion jpeg 2000 and 18 mpeg digital files
- Dubbing Masters: 6 U-matic videotapes
- Reference Copies: 2 VHS videotapes, 6 Windows Media Video and 6 Real Media digital files