My name is Ted Martin and on the occasion of the ASRE Centennial, we are interviewing Mr. Gordon Follette who became a member of ASRE, ASHRAE in 1979. Hi Gordon.

Gordon Follette

Hi.

T.M.

Could you tell us a little bit about your background, your family history, where you grew up, and where you went to school. Those sort of things.

G.F.

Sure. I was born and raised in Fairmont Minnesota. I went to Fairmont high school. I went to University of Minnesota for two years. After 1943 I went into the service for three years in the U.S. Army and spent time in Europe and Asia and traveled all around. And when I got out of the service in 1946, I went to Oregon State to finish my education. I got a BS there in 1947, a BS in mechanical engineering. I got married in 1948, have four children, two boys and two girls. The boys are twins and they are the older. So I started working after college in 1947 at Northwest Baker Ice Machine Company which was a arm of the Baker Ice Machine Company in Omaha Nebraska. And they were still called ice machine company then. I worked there for six years as a sales engineer and I sold refrigeration systems. And I was quite active in the fruit business, apples, pears, and so forth. I did a lot of work in trying to, what's the word, lengthen the storage time for apples and pears. I worked with Dr. Henry Hansen and Hartman at Oregon State. We developed a way to maintain fruit clear up in the early spring which hadn't been done before. Primarily with the air and activated charcoal made of coconut shells. It was prior to the CO2 storage and that sort of thing that happened. I stayed in that position until 1953 when it became apparent that Baker was going to be sold to another company and be consolidated. So I joined General Foods and went to the Walla Walla Washington plant. It was then the world's largest pea freezing plant. I stayed there for six years. That was an interesting experience. In those days, in the 50s were very vigorous days in the terms of the frozen food industry. It was really booming and so I know during those six years because my wife told me that I averaged 64 1/2 hours a week for six years. And it was a period of time when the industry was expanding at kind of an exponential rate. I was promoted from there, do you want me to keep going?
T.M.  
Yes, keep going. It's very interesting. 
G.F.  
Yeah, so I was promoted from that job in 1958, late 58 to the Western engineering manager for the Birdseye division plants in Oregon, Washington, Idaho, and California. There were about seven plants at the time. So I was then manager of the capital program aspect of Birdseye and so got involved in many freezing processing projects relating to fruits and vegetables. That was also a period of consolidation in the fruit and vegetable business. At that time there were many small plans doing fruits and vegetables even Birdseye had 26 plants at the time. In 1961 they decided that they were going to consolidate and so we closed Yakima, we closed Santa Cruz and we consolidated Hillsborough and we made a major plant out of the Woodburn, Oregon plant. And we spent several billion dollars doing all of this, relocating production and so on. That was in 1961 and 62. That's when we bought that first fluidized bed freezer from our friends at Louis. That consolidation project was then completed and 62 and we increase the production at the Woodburn plant and we built a 60 or 70,000 square foot cold storage plant and made a number of major, what would you call it, construction projects. So after that was completed they decided that they wanted to build a plant down in Santa Cruz area, actually Salinas, and consolidate some more production and that was going to be a combination plant of both freezing and drying. Santa Cruz, also on the California vegetable concentrates dehydration operation. And there was a move to consolidate that in Salinas with some of the production that they had down in Saticoy and Southern California. And close the Hillsborough plant, have a broccoli and dehydration plant. We did all the plans for that but the corporation later decided not to do it. At the end in 1965 I was promoted to division engineering manager for Birdseye Division, General Foods and now I had the whole division, entire engineering department under my wing. And one of the members of that, two members of that group were pioneers in the refrigeration engineering area. One was George W Raye, R-A-Y-E, who was a compatriot of Milt Garland's. They met with each other at the office there in White Plains. Garland then was about 71 or so. He wasn't going to retire either. At any rate this, the division engineering department did all of the engineering including construction in those days. And so this was again another period of where we had quite a bit of expansion going on in the frozen food business. We build a new plant at Lafayette, Indiana to freeze prepared food products. Pizza sticks and other kinds of things. And backing up a minute, in 66 we start off with this Cool Whip deal. That was supposed to be a relatively low volume deal, 3 billion units and it turned out to be 33 billion units. We then had to put plants, or operations in Avon New York, and Lafayette, in Waseca and Modesto, California. So we spend a lot of money putting those things together. Initially all of that Cool Whip was done in a rack or buggy freeze. One day the operation manager came in and said can't you guys do any better than that. So we looked around and we got started on two things. One was a Greer freezer. Do you know the Greer freezer?  
T.M.  
No I'm not familiar with the Greer freezer.  
G.F.  
It's cut like a bookcase.  
T.M.  
Okay.
So we loaded these on and the
Like an Amerio freezer?
No. No it's shelves and it's air, air circulation. This framework is the shelf filled up and it takes you up
and then fills the next one it gets to the top and then you have a whole rack move forward one bay and
that keeps going. On the top and then the bottom will come back around and unload at the same end.
They also made one that would unload on the other end. While that greatly increased the productivity
in addition we took a look at belt freezers, spiral belt freezers. There wasn't any spiral belt freezers then
there were what was called the race track. Like I J White made. Well it works okay for the first one but
it wouldn't hold up in the long temperatures because they were originally made for bakeries. And we
then stumbled on the Northfield at Northfield, Minnesota. They were making their first spiral belt in
1968 I think. They however made theirs based on using the Ashworth patent, where Ashworth had the
patent on the belt. And the way of tensioning the belt so it would operate in these different climates, in
the 100's.
Lower temperatures.
Yeah, or the wide range of temperatures. So we then equipped these lines with those things rather than
the regular rack or trolley freezer, which were labor intensive and so forth. So I stayed with the Birdseye
division until 1973. We had a lot of new products including pickup sticks, and some sandwich products,
a whole bunch of other, some of which didn’t last very long you know.
And where we you living at the time?
In White Plains. I was living in Axton and New Canaan until that time. When I took the division
engineering job I was transferred to the White Plains office. So most people that worked in White Plains
lived in Connecticut because of the tax situation, New York state income tax. Connecticut didn't have an
income tax.
So what happened after 1973?
In 1973 I was still in General Foods Corporation and they had one of these McKenzie studies, what these
big corporations want to do. And they decided it was time to centralize as opposed to decentralize.
These are cycles that these corporations go through. Maybe you’re aware of that.
I've seen it myself, yes.
So we went into the consolidation phase on engineering and so all these arraignments were, like I was
division engineering manager of the Birdseye division now I was in central engineering services. And the
same way with the Maxwell House guys and the Jello guys and whatever. We all piled in here to central
engineering services. Of course that also allowed a certain cut in personnel because we didn't need all of these same people. Which was true because each division staffs for its own work and then there were periods where you don't have a full load and other people have more than a full load. So it's of course it's kind of a better thing. So what I did from 73, 74 I should, until 83. I started out in charge of the branch offices. We had branches-

T.M.
Branch engineering?

G.F.
Yes Battle Creek, Lafayette, Modesto, Hoboken. Etc. so I was in charge of those people that worked in these branch offices and I worked in central engineering. I did that for about two years and then I became manager for energy conservation for General Foods in that same department. And that was one of my major accomplishments, that we went from 11 percent savings in 1974, energy on a per pound basis to 31 percent improvement by 19, in 3 years.

T.M.
And did you achieve a lot of that with refrigeration system design?

G.F.
No, the big this was turning of the screw. In other words, you're the plant manager and you're using x and so I figured out a formula that you can save 7 percent next year. Just managing your business and so forth.

T.M.
Turning off the lights and this sort of thing.

G.F.
Turn off the lights. Don't let the motors run when you're-

T.M.
Watch for steam leaks.

G.F.
Watch for steam leaks or steam traps, refrigeration system operation. Yes there was some of that too but it was kind of an overall thing. I did that for three years until about 1980 at which time I became manager of design and energy resources. I managed the design department for General Foods. Electrical, construction, mechanical. Then also had the consulting engineers. And at that time I started manual drafting in 1980, a lot of people were... in 1981 we started with CAD. We made a study of various other engineering firms that were starting out in this stuff. We picked a lot of CAD and a lot ofAutoCad, in fact we built a special room and so forth for this thing to happen, hired additional people to operate the CAD. And we found that the most important people that have operated CAD machines were people with manual dexterity and normal amount of talent and the best ones were musicians.

T.M.
That's interesting.

G.F.
Because they have a lot of manual dexterity and mind-hand coordination. So that was quite a revealing thing and the happenstance and then realized that we hired a few of them. So I managed the design function then for the last two years for the company. Actually I was going to retire in '81, and start a consulting engineering. I had already built a house in California. So they prevailed on me to stay
another two years and so I did. And I commuted between New York and California. Two weeks in White Plains and one week in California in ? until I retired in April of '83 and I started my one person consulting engineering business.

T.M.
Okay. So how did you make that first step into refrigeration with that first company? Was it just happenstance or was it something you hoped to go into?

G.F.
You mean the Northwest Baker Ice Machine Company?

T.M.
Yes.

G.F.
I was interested in refrigeration from being a small boy. Don't ask me why. And as a matter of fact I studied engineering on refrigeration and air conditioning, both, through the service. I had a book that I carried around with me, air conditioning and refrigeration. It was, I think by two guys from Northwestern University; it's a famous text book. So I studied that. I was just interested in that and when I was a kid, like I said, I worked at the Fairmont Canning Company. I worked in the freezer department, loading frosters and unloading frosters. I remember they had a cold storage room there. I'm going backwards but anyways, the floor was higher in the center than it was at the doorway. I remember this because they had to wheel these buggys to this. What's going on, well we just had a little, it'll go down next year, blah, blah, blah. But when I came back from the service I worked there for six months before I went back to Oregon State and that damn thing was up there about two feet. And every year they just kept sawing off one of these wooden posts. Finally they would cut it down. So I was interested in the refrigeration business right off and when I was at Oregon State I had a professor there, Prof. WH William Martin was his name. He was a mechanical engineering professor at Oregon State. And he was a member of the ASRE, in fact he was, wrote one of the chapters in the 42 Handbook. He was a very good professor. I learned a lot from that and so when I graduated I went looking for a job in the refrigeration business.

T.M.
You actively searched for a job in that area?

G.F.
Absolutely.

T.M.
So many of us fall into it just by-

G.F.
No, no I didn't fall into it by, you know well here's a job type thing.

T.M.
And when did you join ASHRAE?

G.F.
I didn't join until 1979.

Okay so near the end of your career.
G.F.

Yeah. I had some friends in the ASHAE. But I wasn't interested in the AE part. There wasn't any ASRE chapter there. I don't think there was even one in Seattle. There might have been as I said it seems to be oriented pretty much to the eastern half of the United States, ASRE. So I never could join the ASRE even when they merged the place. I don't know why I can't answer that. But when I was, the late 70s, I was encouraged to join ASHRAE by Sam Solling(?) and Joe Webber. Two different people. One of the things I did in the design engineering department for General Foods was I change the way they designed refrigeration systems. Previous design being done, they always use the contractor, contractors design.

T.M.
Okay design build contractor.

G.F.

And I didn't think that was efficient and it was efficient because first of all you got an opinion about how to do things with their equipment, you know ?, or whatever. The second thing is that they were not interested in studying the whole picture. Most of them. I mean they had, you had a project they like to work on that piece and then it kind of was thrown in here or there. With an engineering firm you can get an overall perspective of that scope of work, so that those things get handled. And by getting them the plan and specifications, getting competitive bids it actually helped better prices, better overall result. There was no increase in the schedule if you decided to do it that way.

T.M.
So your time with ASHRAE, the years you've been active in ASHRAE, what various positions have you held here?

G.F.

While I was chairman of TC 10.5 and chairman of TC 11.6 and chairman of 10.9. When I joined ASHRAE I was encouraged to join 10.5 by Joe Webber. Joe was on a rampage about infiltration in cold storage. He got bit by a couple of jobs because of the infiltration factor where it was a lot larger than what you were thinking, you figured with the usual rules of thumb and so forth. And that led to this research on infiltration which was conducted primarily by Georgia Tech changed the whole way that we do the load calculations for refrigeration systems. I still don't think many people use that, but it's a real good system, you know the one that's in the Handbook.

T.M.
That was put in the Handbook in 1980, '81?

G.F.

It went in the Handbook about 1990. This work was being done in the 80s, 83 to 89. And that was awfully good work, I thought. And I don't think nothing that is still Incorporated in the handbook but that's 10-8's business not mine I guess. Although I have commented on it a couple times. And once you get into this infiltration you get into the George Smith problem, everyone calls the problem, situation. So I was quite active in 10.5 in that infiltration business. I was kind of instrumental in getting rid of section 11. We had this section 11 of all of these little committees. And they'd have three or four guys in each committee, you know they'd have a dinner committee, a ? committee, and blah, blah. And it didn't work. I'd come to the meeting like this and we'd have two or three guys who have the committee meeting came and ? committee ?. So I talked to the section head at the time and we ginned up this idea that consolidated everything, consolidate and that's how 10-9 became a committee.
T.M.
And what year would that be?
G.F.
It was about the year we had, it was the year we had the convention in New York, the meeting in New York. What year was that?
T.M.
Oh, I don't know. I wasn't here at that time.
G.F.
The New York meeting.
T.M.
Okay.
G.F.
Because we consolidated all these committees and I was the chairman of that first one. And I remember so vividly because Evans Linzanos was a member of the committee and I appointed him handbook committee too. It was the best appointment I ever made. He's a world leader. He really is. Not only that, 10.9 that's 18 chapters to do. I mean it was a monumental job. But he organized that so well that we set up a system that does the job. Not because previously most of those chapters hadn't been revised since '66. And they were really getting upset about that.
T.M.
So your years with ASHRAE, what have they done for your career and personal growth and have you enjoyed them?
G.F.
Yes, I really have enjoyed them. They've done well for my personal growth. I haven't got a nickel's worth of business out of it. And that wasn't the intent out of it. The real reason that I joined ASHRAE was I want to give something back. It had been taken all of those years, their ideas and Handbooks, thoughts and so forth. That's the reason I enjoy it.
T.M.
Of all the people that you've mentioned which one, or which people would say influenced you the most in your career?
G.F.
The ones that I've mentioned.
T.M.
Yes or any the other people you come across in the industry over the years. Is there one that's really stands out as an inspiration to you?
G.F.
Yes. My first one, his name was Evan R Morris, Van Morris. He was the manager of the Portland branch of the Northwest Baker Ice Machine Company. He was an Omaha native that had moved out to Oregon during the war and he was a friend of Vince Kaufmann's who ran the Northwest Bakers Ice Machine outfit in Seattle. Vince was also from Omaha, because Baker was from Omaha. And Vince Kaufmann encouraged him to take this job after the war and he did. And I went to work for him and he was a marvelous teacher. I learned more from him than anything. His background was air conditioning and he took that background from air conditioning and made it work in refrigeration. Really, I had a lot of
respect for that. He and I did a lot of work, as I said relative to the group storages. And he became quite an expert in that area.

T.M.

And what would you say to a young person starting out today in this field? What would you tell them?

G.F.

What would I tell them? I would tell them, I had that written down here.

T.M.

I have two minutes of tape left.

G.F.

Oh really! I said be active, be active, be active.

T.M.

Pretty much sums it up. Get involved in the industry.

G.F.

Get involved in the industry, get involved with the associations and so forth. And so I am active in the local chapter and then the ? and ?. and so it really pays dividends to be active, not only from your business point of view but for your growth. You get a lot of good ideas from your associations and fellow people in the same business.

T.M.

Very good. Thanks very much Gordon.

G.F.

Okay.

T.M.

Pleasure meeting you.

G.F.

Pleasure meeting you.