

INTERVIEW WITH
ROBERT TSCHANNEN
(RETIRED)
SHERWIN WILLIAMS COMPANY
CLEVELAND, OHIO

DECEMBER 14, 1990

Interview Conducted By

KATHLEEN MCDERMOTT
THE WINTHROP GROUP, INC.
&
PATRICIA ELDREDGE
SHERWIN-WILLIAMS COMPANY

BK/1st Draft/1-6-91
JG?Edited/5-14-91

N10814

WG: I'm here at Sherwin Williams interviewing Bob Tschannen and today is December 14th, 1990. Bob, would you start out by telling us how you first came to work at Sherwin-Williams and all of the jobs you've had since the beginning.

BT: ~~Well~~, I came ^{to the Headquarters office to talk} ~~down here~~ originally and ~~talked~~ to a gentleman by the name of Art Holton who was the technical director at that time. I wanted a job in operations but I wanted to have two years in technical before I went into operations, but he said at that time, "We don't do those things." So I said, "Well, then I don't want to talk to you." ~~So~~ ^{He} sent me over to see Mr. Mills who was the -- in those days they didn't have as many vice presidents -- ~~so~~ Mr. Mills, I think, was the Director of Operations or Manufacturing. ~~So~~ I talked to him briefly and ~~so~~ he sent me down to the Cleveland factory to see Mr. George ^{MENZ} ~~Mills~~ who was the plant manager at that time. Mr. ^{MENZ} ~~Mills~~ hired me and ~~so~~ I went to work at the Cleveland factory.

WG: We're talking what year?

BT: June, 1950.

Another Person: What did you do?

BT: ~~Well~~ I was a graduate chemical engineer and the first job I had was working on the time study standards, not using chemical engineering at all. ~~So~~ after about a year and a half doing that

~~then~~ they sent me down to be the foreman of the filling department. I knew where it was but I didn't know what they did. So they immediately made me the boss.

WG: What ^{Did}~~so~~ they do?

BT: They put the paint into the cans. The caulking into the tubes and all kinds of things. After running the filling department for about two to three years ~~then~~ I was circulated throughout the whole factory, ~~almost~~ running all the operations. ~~And~~ I did go into technical for six months, a crash course, ~~just~~ to learn a smattering about all the products that we manufactured. Then I came back unofficially as ~~a~~ assistant superintendent and ~~then~~ in 1961 I became the plant manager.

WG: Of the Chicago plant?

BT: No, the Cleveland plant. ~~And~~ ^I in 1965 I was moved up to headquarters as the general manager of manufacturing. ~~And~~ For six months I lived in Detroit or I lived on an airplane between here and Detroit trying to get those operations straightened out. ~~Then~~ after six months I stayed here and started managing all the other facilities around the country so my title kept changing. Right now I couldn't tell you what they all were. ~~I guess~~ I became a Vice President in 1975. I was Vice President of Operations. And ~~then~~ in 1979, ~~of course~~, Mr. Breen came and then we came up with the

title of Vice President of Administrative Services and Facilities.

~~Then~~ I retired in 1987.

WG: 1975, VP of Operations for all the plants?

BT: Yes.

Another Person (Pat?): That was the Acme Plant in Detroit?

BT: ~~Yes~~ THE HOWE PLANT was only one of many.

Pat: Were there great problems? ~~at the Howe Plant?~~

BT: There were huge quality problems, huge labor problems, huge productivity problems, huge management problems. ~~I guess~~ I changed plant managers three times throughout the ^{next} five years. It ~~just~~ became obvious that there was no way we could make it an efficient plant.

Pat: So when did you close it?

BT: Probably about '78. And we opened Richmond in 1976 because it was basically making automotive paints ^{FROM} ~~in~~ Detroit. ~~And~~ we opened the Richmond Plant in 1976. ^{It} It was then that we ^{finally} phased out Detroit and finally closed and sold the plant.

WG: What brought on all the problems in the Acme plant all at once?

BT: They didn't come on all at once. I think people knew they were there but they didn't ^{assign anyone} have anybody to spend the amount of time that was necessary ^{for analysis and make the changes required.} ~~at the company to stave them off.~~

WG: What is the factory operations like in making paint? How is paint made in the factory? What are the operations that are involved so that we can get a sense of what the complexity is?

BT: ~~Well,~~ ^I in its simplest form paint is a mixture of pigments, inerts, and ~~then~~ vehicles such as latex, or a manufactured alkyd resins or oils ^{and} solvents. ~~And so~~ through various mixing and grinding means, they can take all those ingredients, put them together and come up with a quality product that will give you the smoothest ^{as} glass or the smoothest surface, ~~on the automobiles that you have today.~~ ^{The paint is formulated to} Have it give you a good appearance. Whatever appearance you're looking for, whether you want a flat finish, a high gloss or just a satin finish. ~~That is the~~ ^{Basic} It's a mixing, grinding operation. And of course you do have to shade ~~the paint~~ to a thousand colors. Whatever color ~~that~~ they want. ^{specific}

Pat: How did the Cleveland factory work? I only saw it when it was being torn down.

BT: ~~Well~~, the Cleveland factory was a ^{relatively} ~~very~~ inefficient factory.

Pat: Right, but how did it work?

BT: Back to when?

Pat: When you were the superintendent.

BT: If you go all the way back they used to make the barrels. But we're not going to go into that. ~~Well, it too was an inefficient~~
The Cleveland Factory had operation. ~~It was~~ ^{we} a good work force. ~~you~~ could do just as well as some of the new factories that we had at that time. But the raw materials would come in on the ground floor, they would be stored there, they would be brought to the fifth floor, ~~in you will~~, where the materials were mixed.

WG: Were they mixed on an assembly line or something?

BT: No. They ^{were} ~~are~~ mixed in large vessels. They would be mixed in 200 gallon mixers, 400 gallon mixers, 50 gallon mixers, depending on whether you're making a 25 gallon batch or a 10,000 gallon batch. The materials would be mixed, then, from the mixers they would be dropped by gravity into a roller mill which would take the paste and grind it up. If you've ever seen [colander] mills where they're ^{compounding} ~~taking~~ rubber for making tires, they just keep blending it from one roll to another. In this case, you'd be putting the

mixture through two tight rolls which would be actually breaking up the agglomerates and making it ^a fine and dispersion.

Pat: Would this be a paste at this point?

BT: Yes, a paste.

Pat: What you mixed upstairs would not have been the vehicle?

BT: ~~Yes~~. Part of it. You would be mixing 30 to 40 percent of the final paint. If it didn't go into a roller mill you could add all those ingredients into a ball mill. ~~Of course~~ A ball mill has ~~a~~ small 5/8¹⁰ one inch steel balls in it and ~~that could run anywhere~~ ^{THE mill would rotate or turn} from 12 to 72 hours before you'd get the dispersion which you needed, ~~for example~~. If you didn't put it into a ball~~ing~~ mill you could put it into a pebble mill. Now a pebble mill is the same as a ball~~ing~~ mill except that it's got a stone lining and the steel balls are not steel balls but they're small pebbles. They're picked up off the beaches somewhere in Spain and it's a very hard stone ~~and~~ that they use for grinding clear varnishes because there's no discoloration which you~~s~~ get from steel. If you didn't put it into a ball mill or a pebble mill or a roller mill, you could put it into a [Morehouse] mill which is just very high speed stones that you'd drop the paint into and it just blends it and squeezes it out through the stones. ~~Anything to disperse itself.~~
At the time when I started there they also had what they called

stone mills which goes back a hundred years. Those are very slow grinding mills, much the same as you would grind flour. But those went out ~~pretty~~ ^{started} shortly after I got there. And then of course ^{there was} the improvement in the particle size of the various pigments, various inerts over the years ^{and} ~~was such that today we don't use roller mills.~~ ^{The roller mills were eliminated} ~~Probably~~ We ~~can~~ ^{probably} make 80% of the paint ~~that they make today,~~ ^{and of course} (a good share of it is latex) ~~they make that in what~~ ^{MIXER.} they call a high speed dispersion ~~so~~ that technique was developed ~~probably~~ about 1958 ~~to~~ 1960.

WG: Was that considered a real innovation in technology for paint?

BT: Yes. I did quite a bit of work on that myself when I was in the lab and when I came back into the factory I didn't tell people what I was doing because a lot of people would have been critical and said that you can't do it. It worked. ^{This was where}

^{Company} [Morehouse] developed a high speed dispersion ^{Blake. About this} ~~place.~~ ^{Then what} happened, ~~though~~ ^{Time early '60's}, the paint industry, per se put a lot more pressure on the pigment manufacturers to do a much better job of ^{giving you}

a more finely dispersed pigments and inerts which could be broken up very easy compared to what ~~some of the other was.~~ ^{we received earlier.} We say we do

grinding, but the paint industry really does not do any particle reduction. What ^{we are} ~~you're~~ trying to do is break the agglomerates down ^{to a very fine dispersion.} because when you start getting into real particle size of carbon blacks or titanium or some of these ~~others~~ ^{pigments} We don't begin to approach ~~that~~. If we could approach that we could use one-tenth

The ultimate

Particle size

7

carbon blacks, titanium pigments, and other pigments

0007-SWP-0060348

the pigment that we use.

WG: Is that something that R&D people work on?

BT: *Certainly* Sure. ~~But even the agglomerates you've got~~ *Very good* the cohesive forces of the particles to each other is ~~so~~ great that it takes a lot of work to pull them apart.

WG: Do those pebble and steel ball ~~things~~ *Mills* run on gravity? Is that the idea?

BT: Oh no. It's ~~just~~ *steel* a cylinder and they're ~~just~~ *turning* tumbling. In the case of the roller mills you've got one roll *under pressure* against another roll, ~~against another roll~~ *from 3 roll to 5 roll mills.* and they're ~~just~~ feeding against each other under great pressure. In the case of the ~~old~~ *Morehouse* mills, which ~~aren't around anymore~~ *we originally*, they still used them for grinding mustard, ~~that's where they originated.~~ *We* Then they started using the ~~technique~~ *morehouse mills* for latex paint. ~~It's nothing but 8 or 9 inch stones nesting on each other, just like I said, just like two stones for grinding flour. So they used other techniques and brought it down to where we could use it for paint. Instead of running it at 20 or 50 revolutions per minute we were running them at 1800 or 2,000 revolutions per minute. The important thing is to find a stone that didn't fly apart. So through whatever means you use to disperse your pigments and get it incorporated in the vehicle, then after that you thin the materials down with~~ *in the late 40's. the mill carriers. 400*

additional vehicles ^{and} ~~or a~~ solvents to get it to the consistency ^{of the paint} ~~that~~
you wanted ~~it to~~. Then you would start to shade the product to the
final color and then ~~you would~~ adjust the viscosity or the thinness
of the paint, ^{The thinning is done by} if you will. ~~You'd~~ brush it and do whatever testing
you have. ~~And~~ then it would go to the filling department.
required.

Pat: We started on the fifth floor, now we're on the forth floor?

BT: No, we're probably on the third floor now, ~~because the fifth~~
floor ^{is the mixing AREA, The fourth floor has the} ~~is here, the~~ grinding equipment, ~~is here and~~ the thinning
tanks are on the third floor. And ~~then~~ the filling department is
initially below all the filling tanks.

WG: What kind of processes are set up to measure whether the
material is thinned correctly or ground correctly or whatever it
is? How is all that regulated?

BT: Well, ~~through~~ various testing methods. Good paint men could
~~turn around and just~~ rub the paint ^{between} between two knives and could
tell you how good it ~~is~~. Like a cake, if you're rubbing it and
it's still got lumps in it, ^{it needs more refining} ~~it's no good~~. Same way with paint. But
they also had gauges where they would ~~just~~ ^{pour} pour the finished
product on it, draw it down, and they could see exactly what level
of dispersion they had. ~~And~~ they had strict requirements for this,
depending on whether you were making house paint, or ~~whether you~~
were making wall paint or whether you were making ^{a fine} enamel to

finish off a good piece of furniture or ^{metal cabinets} something.

WG: Is there one kind of paint that would be more dispersed than others?

BT: Oh yes.

WG: Which one? Tell us. I wasn't sure which.

BT: ~~Well~~ house paint would be dispersed ~~probably~~ the least of all. ~~Whereas~~ If you want a flat wall paint you don't generally get into a ^{very fine} ~~high~~ dispersion. ~~That~~ ^{It} would be somewhat better than a house paint. ~~But~~ If you wanted to paint ^{a metal} cabinet or if you wanted to paint an automobile that has to be extremely fine.

WG: And hence the need for the highest dispersion.

BT: ^{Yes} ~~That's~~ when I said sometimes you could make runs of finishes in a ball mill for 72 hours. A lot of those would be automotive finishes because not only do ^{you} want the dispersion but you also want the color development. ~~AREN'T~~

WG: And how is color development aided by...

BT: You continue to work on it. Sometimes you might have the dispersion you want but you don't have the color development, ~~se-you~~

the grinding
may have to ~~run it~~ *continue for* another 24 or 48 hours.

Pat: The smaller the particles are the more color is *developed*?

yes, more
BT: ~~The~~ color is developed. You can grind blacks and after 24 hours it comes out brown. To the normal eye it's black but relatively speaking it's brown. You run it for 48 hours and now it's less brown and it's getting ~~less~~ *MORE* black as you run it. You run it for 72 hours and it's really a jet black. After 24 hours you say, "That's not a black, that's a brown." *by comparison!* ~~So~~ *the* it's a case of where you're trying to get ~~that~~ "jetness." That's true of a lot of colors.

Pat: Which colors would they be? Which color would most require the grinding to bring out the color?

BT: Blacks probably require the most. Phthalo cyanide blues were very difficult to grind. Sometimes it's not so much a question of the development of the color but it's also the ability to grind that particular pigment. Some of the original pigments were ~~just~~ *almost impossible* terrible and even Phthalo cyanide blues were very difficult.

WG: When you say, "terrible," *you* do *you* mean hard to break apart?

BT: Very difficult to break apart. Terrible's a bad word.

WG: When pigment comes to you does it come in chunks?

BT: No, no, no. It comes in a powder.

WG: But the particles themselves...

BT: They'd be similar to your face powder. If you take your face powder and try to dissolve it and mix it up with water you ^{may} get a ~~little lumpy stuff~~. MIXTURE.

WG: So what you're trying to do is even out that consistency?

BT: *your goal is to have* ~~so~~ everything throughout the whole ~~thing~~ *batch* ~~is~~ the same consistency, *and you control size of the batch* ~~and then~~ when it passes all the quality control ~~and~~ meets the specifications set by either our lab or by the customer, ~~then~~ it's turned over to the filling department. We then fill it into whatever container is specified. It might be a tank ~~or~~ car, it might be a tank ~~or~~ wagon, it might be drums, it might be five gallon pails. Back in the early '50s, early '60s we were still filling quarter pints, half pints and pints. At that time there was a lot of demand for ~~that~~ *small size containers* but you'd go in and you'd buy a quarter of a pint which isn't very much paint but In Europe, *London* ~~a~~ *SMALL SIZE CONTAINERS HAVE A MARKET* quarter of a pint ~~is~~ still pretty good because that's all you need to paint a bicycle. And that's part of it. It just depends on what the needs were. Now, I don't think we fill any quarter pints. Very few half pints. We fill some pints. ~~the~~ the filling job is

a lot easier today than it was then.

Pat: Bob, what sort of products would today have a half pint or even a pint? Nothing that you see in Sherwin-Williams store.

BT: ~~Well~~, I think we are still filling automotive colors in pints and quarts, ~~and gallons~~. ⁱⁿ ~~On~~ prepackaged automotive colors, quarts are very prevalent, ~~but~~ I ~~still~~ ^{still fill} think we ~~put~~ quite a few in pints. ~~I~~ ~~may be wrong but I think we do~~. Because, to finish an automobile that had a damaged fender, you don't need a gallon. Quite often all you need is two spray cans. ~~You could make 15 spray cans out of a pint of paint.~~ Other companies are still filling quarter ~~filling~~ pints and half pints of specialty products.

WG: Why?

BT: ~~Well~~, ^{jobs only 12-15 each} it's a very high profit item. Some ~~people will still~~ go in and ^a buy quarter pint or a half pint of a special product. I

think ~~maybe~~ Ace Hardware might carry some special colors in ^{small containers} ~~those~~.

~~Our stores carry small packages of outside colors.~~ ~~But I think it's a~~ very expensive proposition from an inventory ^{could be a}

standpoint. You can never guess what the demand is going to be ^{out}

~~there~~. There's just no way ^{MAR NOT was in the early 50's was} ~~to~~ ^{one of the real heavy}

products in quarter pints and half pints. If you refinish a table

you could ~~just turn around~~ get it all sanded ^{and come in} and put

on a coat of ^{MAR NOT} furniture finish, ~~basically~~.

Pat: It was a varnish stain. So you could put on both the stain and the varnish at the same time.

BT: ^{yes} It looked ^{very good.} ~~super~~. I don't think we make that ^{Product} anymore.

WG: Now at the various points in the process you'd have somebody, presumably a union person or some kind of production person, who was doing the work and then what, an engineer or some sort of testing person who was around at each point in the factory?

BT: ^{Yes} ~~Well~~, the technicians. They would be in the laboratory.

WG: Who was checking the specs at each point?

BT: ^{Hourly & Salaried} The ^A person who was doing the work. Whether it be union or non-union employee, it would be part of his ^{His} job to see to it that ~~he met~~ the necessary quality controls. ^{was met.}

WG: Now has the work that you've described in the factory changed much over the years? Like, for instance, how it was in the late '50s until the present.

BT: ^{Yes} ~~Well~~, we're certainly much more automated.

WG: Can you tell us about that?

BT: When I first started with the Cleveland factory, for example, a 2,000 gallon tank was ~~probably~~ the biggest tank they had, ~~and I'd say~~ when I became plant manager we put in 8,000 gallon tanks. Again, people said you can't do this but ~~we did it anyway~~. *engineered correctly, they worked,* In the early days they said you couldn't make latex paints in more than 300 or 400 gallon tanks. Today we make them in 10,000 gallon tanks. We shaded everything strictly by eye at that time. Today, ~~I would say that~~ probably 90% of the shading ~~now~~ is done by a person who puts the various ~~color pigments~~ *shading materials* into the tanks, ~~the~~ *after the* computer ~~with the color eye~~, with the assistance of the color eye, ~~the instrumentation will tell you what to put in.~~ *and how much*

WG: When did the computer technology come in for pigment?

BT: You mean for shading?

WG: Yes. Excuse me, for shading.

BT: That evolved. We had a man that was most instrumental in Sherwin-Williams by the name of Sam Huey. He saw a real opportunity and he was in charge of our quality control team back then. He continued to persist and then the company saw the merit in it and set him up in a special department to do nothing but handle ~~the shading~~ *of paint products* ~~and the~~ instrumentation.

WG: What year are we talking generally here?

BT: I'd say Sam probably started on that project probably about 1955, through ~~1960~~. ~~I mean~~ ^{It was available.} It was very crude at that time, but there ~~was~~ some instrumentation ^{shading bases} at that time that ~~was~~ available. There was such a variation in the pigments and everything else that it became a difficult ^{process to control} piece of equipment to use. ~~But~~ ^{As the quality} the pigments got better, as the factories got better controlling the bases ~~and things~~ then the system ^{improved} got ~~better~~ to the point where ^{of the batches are} that today ~~it's~~ probably 90% ^{THAT'S} shaded ~~now~~ with instrumentation. That's throughout the paint industry. ~~That~~ ^{we don't} was a very large change. ~~And~~ ^{yet you did not} ~~However~~ ^{the} you ~~did not~~ blindly accept the result of ~~that~~ instrument. You still ~~turned around and compared the colors so that~~ ^{to the standards very early} in case someone misread what the computer said or put the wrong materials in ^{the tank} thinking ~~that that's what it was, then~~ you just don't blindly go down the road and say, "Well, that's what the computer said. Ship it!" It's wrong. ~~So~~ ^{compare} they still have to visually ~~look at this~~. The instrument can't compare to the human eye. The human eye can see variations that an instrument can ~~not~~.

Pat: I'm going to quote you on that. Some of these computers that read the little chips ^{can} and supposedly come up with the ~~same~~ color.

BT: Sam Huey came up with the idea ^{CF} with freezing all of our paint chips because all color chips change. ^{IF you stole color chips anywhere else} ~~You put them in /unclear/~~ they'll change. Hang a dress in a closet and ^{the colors will} ~~don't /unclear/ it~~ changes. ~~And~~ ^{in the same way} the same way with color chips, ~~so then~~ Sam Huey and his group came up with the fact that if you freeze the color chips

the color will not change.

Pat: Had nobody in the industry done that before?

BT: No, I don't think so.

Pat: Is that so?

BT: I don't know if Sam Huey's still alive or not? *If so ask Him:*

Pat: Yes he is, I interviewed him. At least two years ago I interviewed him.

BT: Another person that might have a little more detail on that is

Chuck Sherman, ~~at the store~~. ^{WORKS} Chuck Sherman ^{up} in Chicago. He was *part of* ~~that group early~~. *SAM'S original*

Pat: [Bev Danko] was in that group later.

BT: Later, right, but not that early. You could authenticate that a little more.

WG: So we've got size of the tanks, shading, what are some of the other things that you think have changed since the early days?

BT: Well, I didn't go back to making the resins for varnishes, ~~and~~

~~stuff.~~ That has also changed pretty drastically. Of course when I came with the company they were already making [alkyds] in large kettles ^{3500 Gallons} but at the time they were ^{also} still making resins in 150 gallon pots over open fires. Over charcoal fires! They would be set up in oven stalls ^{T.E. 12 stalls} if you will, with open ^{doors} ^{INCS} so they would push the resin materials over the coke fires and then they would keep stirring it by hand and come back and check it 10 minutes later and stir it by hand, and if the ^{temperature} fire's getting too ^{High} hot they'd pull it off ^{and let it cool off then} and push it on and pull it off. ^{until they thought the batch was ready.}

WG: How long did it take for something to cook up?

BT: 12 to 24 hours. It was a three shift operation. They told me they used to have a fire every day. They ^{would} ~~is~~ just have a big heavy blanket ^{handy if a} when ^{start} the fire would come they ^{would} just cover the whole kettle. Pull it off the fire and ^{wait for the fire to go out} ~~cover it with a blanket and not~~ ^{No one} get too excited about it.

WG: The material itself would catch fire?

BT: Oh sure, because you've got ^{Resin} solvent fumes and ~~stuff~~ ^{and other chemicals} coming off. ~~/unclear/ have a fire.~~ It got to be pretty common.

WG: So now what do they do?

BT: ~~Well~~ I don't know anyone that's large in the business that

The open fire pits
uses that method anymore. *WG* Those are all shut down. ~~So now they~~
use all closed kettles. *we* They will make resin batches now up to
10,000 gallons. *All the equipment has been standardized to produce*
~~So everything is just standards unclear.~~ Because
the same quality across the country produced
the market has expanded also. We used to make 40, 50 million
gallons of paint. *in the early '50s* I don't know what they make today. 125 million?
~~But~~ *Ben* I remember putting a production together for 1968. I think in
those days manufacturing did the forecasting and sales tried to
sell it. ~~But they wouldn't forecast.~~ I remember 68 million
gallons in '68. That was our motto that year: "68 in '68."

WG: Did you reach it?

BT: Didn't quite make it. I think we hit 67. But I don't know
what it is today. That was a lot of paint in those days. A lot of
paint.

Pat: Well, we don't make our own resins today that's another
change.

The resin is there
BT: ~~Well, sure,~~ *WG* we make ~~all~~ our own resins.

WG: We do? I thought we bought all our resins.

BT: We don't make latex resins.

Pat: What other kind of resins do we make?

BT: ~~well~~, [✓] we make all the [alkyd] resins.

Pat: AT what factories?

BT: ~~well~~, [✓] we make them in Chicago, we ~~make them~~ in Dallas, we ~~make~~
~~them~~ in Richmond, Kentucky. We used to have a resin plant in every
plant but we ~~just~~ ^{some of} gradually shut ~~them all~~ down, ~~just~~ ^{because} because of
the economy of scale.

WG: Can we talk a little bit about that and how the operating
structure has changed? Because we've heard that things used to be
that almost every plant made lots of different things and that's
changed quite a bit.

BT: When Sherwin-Williams started buying companies -- when they
bought Acme, Acme was able to make everything that they wanted or
they needed. Then when we bought Lowe Brothers in Dayton they made
everything they needed. And then we bought W.W. Lawrence in ^{Pittsburg} New
~~Jersey and we bought that plant in Pittsburgh.~~ ^{and Lucas Paints in} Can't think of the
~~name right now.~~

Pat: W.W. Lawrence. Lucas was in [Gibbsborough].

BT: That was the same as in Gibbsborough too, right? And of
course [✓] we had a plant in Oakland and a plant in L.A. The plant in
Dallas was always Sherwin-Williams. But each one of ^{those} plants

Reduced and eliminated overheads
it seemed wise to go ahead and try to produce everything. Well,

Transferred to Head quarters
when I came uptown in '65 and we started to take a look at

Small batches
everybody making 100 gallons of a product, or 50 gallons or 500 gallons we started looking at economy of scale. And that's when we

started to specialize. The same way with automotive. Package

colors, just a huge amount of colors, And we were making them in

Detroit and Chicago and Los Angeles and Dallas. We had large

quality problems because they were very demanding products and the

raw materials were rather unique to them. So when we started to

look at the cost of carrying raw materials, the cost of

manufacturing, the quality problems and *inventory* everything we had we

decided it was time for us to specialize. And of course by the

early '70s we were able to start to computerize our inventory

management. So we were able to put together some cost models which

US would tell you which was the *lowest cost production strategy* cheapest way of doing/unclear/.

That's when we started to say, "Okay, with this plant we'll do this *produce them*

Products and with this plant we'll do that." Instead of having five plants

making a product we'll have one plant do it in much larger

quantities. Of course *that* at time shipping costs were much lower than

they are now. I think that the pendulum has actually swung the

other way. Because shipping costs are so much higher now that *the*

manufacturing strategy has continued to change would say that probably 5 of 10 years ago they started saying,

"Well, it's cheaper for us to start producing this in another

factory, than to just try to produce it in one." So it's a

constantly moving situation.

WG: And where are we now? Are we more towards strategically locating certain factories dedicated to one thing?

BT: I's say we're still very specialized.

Pat: About when did you say the change would have come from diversified factories to dedicated?

BT: Probably would have started right around 1968 to '70.

WG: And was that in concert with any other major changes going on in the company or was it just something within the operations group?

BT: Well, ~~In about~~ 1968 or 1969 we put together a 5 or 10 year strategic plan for operations which ~~would~~ tried to anticipate what our demands were going to be. We took a look at the facilities that we had, many of the ⁵⁰ ~~100~~ to ¹⁰⁰ ~~150~~ years old. Many of them, such as the Cleveland factory, very inefficient, because you can't handle a drum 19 times before you get it to the customer. But that's the way it was. ^{many factories had 4-5 and 7 stories.} You can't take materials up on elevators ^{efficiently.} ~~efficiently.~~ It just became a herculean task to try to make those plants efficient. ~~so~~ ^{at} that time we put together a plan to build a new factory in Atlanta. Of course we built a new automotive plant in Richmond.

Pat: Garland was before that?

BT: Garland was opened, ~~the new plant was opened~~ in '59. So then it ~~just~~ became obvious we had to shut down the Dayton factory, the Detroit factory, the Los Angeles factory, the ^{John Lucas} ~~Gibbsborough~~ factory, the little ^{small} ~~smelt~~ plant in Pittsburgh, ~~the~~ W.W. Lawrence. ~~which was really nothing.~~

Pat: This was after your strategic plan in '68?

BT: Yes. ~~And~~ ^{we} built the new emulsion plant in Chicago, unfortunately that's where we put it. ^{Atlanta, Garland, Throatsboro,} ~~Those were the three free~~ ^{Chicago Emulsion, and finally the Richmond Petrochemical Plant.} ~~standing new plants.~~ Now, we made millions of dollars of modifications to the ~~still~~ existing plants ^{today}. I would ^{think} say that the manufacturing and operations people today are still taking a look at the situation of do we produce everything in every factory. It's ~~still~~ a very logical thing. You must do that or else you're not going to survive because of costs.

WG: It strikes me that you were thinking strategically somewhat earlier than the rest of the company.

BT: I won't answer that question. I'd like to think so.

WG: I don't mean to put you on the spot at all but we have been getting a sense of in our interviews is that strategic planning as such didn't really come in until later on, until maybe almost a decade later with Breen. But that's why I'm interested about

certain strategic planning that was going on earlier in the company.

BT: ~~well~~, that's what we did in operations. I'm ^{was mainly} ~~only~~ in the operations end, not the ^{marketing} ~~distribution~~ end of the business.

WG: And so the strategic plan would have covered operations all kinds of paint, including the automotive division?

BT: ~~DE~~ yes.

Pat: It would be nice to see a copy of that.

WG: Is there anyway we could get some documents related to that?

BT: I don't know. I've thrown most of them out. At that time it was not a formalized type of document that you know today. Many things were done on the back of an envelope. I'd say that the plan I'm talking about right now, we had it on three sheets of paper. It was approved by Spencer and Baldwin and Prescott and I guess the board. Basically, that's where we were headed.

WG: And just to recap that, the idea was to begin to think about creating economies of scale by consolidating different kinds of operations, in particular, plants.

BT: ~~Okay~~, but it's also anticipating the future growth and the fact that there's no way that we could continue with those facilities and be efficient ^{10-20 years later} ~~20 years from now~~. The old is great but eventually you've got to eliminate it *if it is no longer cost effective*.

Pat: Just to recap too. So we closed Lawrence, and Lowe in Dayton and Lucas in [Gibbsborough] and L.A. What was made in L.A., everything?

BT: L.A. was our west coast automotive facility and they made package colors. I'd say that probably 30% of their capacity was automotive, *However, their quality could have been better. In general, and Word wasn't so good and he's right.* But they did quite well. ~~But they also made latex, they also made house paints, They made the whole nine yards and it became, again, just very, very inefficient.~~ *But they also made latex, they also made house paints, and many other products. However, their costs were out of control. Of course and the plant had to be shut down.*

Pat: And then from that came the building of [Morrow] and the Chicago emulsion from that same plan.

BT: And the Richmond plant. And then, of course, ^{major} we made huge modifications to Newark, to Oakland, ^{and} ~~and then, of course,~~ ^{Because of our growth} we had to make ^{major additions} ~~huge modifications~~ to [Garland] as the years went on. That was mostly in the filling and finishing ^{at Garland} ~~end of it, of course, at [Garland].~~

Pat: How about [Dombre] /unclear/. When did you play with that.

A long time ago, right?

Do not understand!
6/84

BT: A long time ago. Basically we got that during the [Rock].

Pat: You got that from Hemingway and company.

BT: Right. I really don't know anything about that.

Pat: Okay, so then it didn't come under your...with insecticides and such.

BT: That's right.

WG: What's the difference the way Sherwin-Williams makes paint and the way its competitors make paint?

BT: Not much. ~~Not much.~~

WG: The processes are basically the same?

BT: Right. The basic equipment is *standard in the market place.* ~~pretty much the same.~~

WG: So what differentiates our paint from theirs?

BT: That would have to be the formulations and ~~then~~ the quality control. ~~That's the basic difference.~~

WG: Within the different lines of paint within Sherwin-Williams, what differentiates the paint? Again, the formulas?

BT: The formulas.

WG: So different amounts of time putting it through those processes you described to us?

End of Side 1, Tape 1

Beginning of Side 2, Tape 1

BT: ...which would mean that you'd have much better coverage.

WG: Coverage. What do you mean by that?

Coverage is the characteristic a paint product has
BT: It means that you would have, let's say, a much wider paint, *cover any surface regardless of the color* or if you were going to paint a material over a whole painted *of the old surface with one coat* surface you could cover it with one coat. Some materials you could not cover with one coat. Some people don't mind spending \$22.00 for a gallon of paint. Some people only want to spent \$10.00. I always remember a story of a woman that told me, "Gee, Bob, I just bought some paint. They had a two-for-one sale. What so you think?" And I said, " ~~was~~, if I was you I would buy Sherwin-Williams." She said, "What about this two-for-one sale?" I said, "If you're happy with it and that's what you want to spend, it's up to you. But I would buy Sherwin-Williams paint. And I'd always

buy the best paint I could buy, because the labor is the real cost." ~~So~~ three months later she saw me and she said, "Bob, I should have taken your advice." I said, "Why?" She said, "Well, I went to wash those walls and all the paint washed off." This is the thing that people, for some reason or another just don't fully understand. Two or three or five dollars more for a can of paint that has got ^{some} ~~so much~~ quality in it, ^{will satisfy them} ~~They're well served by doing~~ ~~it~~ ^{for many years.}

WG: Now you described to us that in the late '60s, early '70s a ^{number} ~~batch~~ of plants were built or dedicated and I suppose the old ones closed down. What is present, ^{status} ~~or~~ say about when you retired, ~~state~~ of the plants and equipment in the company? Are there new ones in the works or did you know that, or are they somewhat older and in need of being updated? What's the present status of the different plants?

BT: I'd say the present status is that they are very up to date and very efficient. We still have some old plants. I would guess that, long range, they will eventually be closed. Our Newark plant is still 80 to 100 years old. Our Oakland plant is still 80 to 100 years old.

Pat: What's being made at Oakland now?

BT: All Latex. And that's all that's being made at Newark.

That's probably the reason that they are still open. ~~That is,~~
~~Latex~~ is much simpler and easier to make and manufacture. The
number of raw materials are considerably ^{less} ~~lower~~ than it would be for
a full line of oil paints. And I say ~~that because~~ oil paints may
have 250 or 300 raw materials. A full line of latex paint may only
have 60 materials. And ~~so,~~ even in an old facility you can make
latex paint very efficiently. ~~And the key to the real cost to it~~
is in the filling and finishing. ^{Low} ~~That's where you probably~~ ^{There are} two ~~to~~
three employees in the filling and finishing area for one in
manufacturing. There's a lot of material handling. You've got to
handle all the cans, ~~you've got to handle~~ cartons, ^{and} ~~you've got~~ a
tremendous amount of equipment to wash up. ~~But~~ you do have the
capabilities of automatic filling machines. I mean that's improved
greatly. ~~Automatic filling machines,~~ you've got automatic
packaging equipment now. Cartons are automatically sealed, ^{and palletized.} ~~you've~~
~~even got it to point where~~ ^{IN Chicago} the emulsion plant in Chicago, the five
gallon pails are automatically or mechanically put on to pallets.
~~so~~ When you get the proper scale and you can make the investment,
^{can} you come up with a very efficient operation. That's probably one
of the main reasons, other than quality, that ^{we are} ~~is~~ specialized. ~~We~~
~~are able to do this.~~ > An, of course, ^{if} the ^{are} plant ^{which helps to reduce cost} is already
written off, ^{therefore} you don't have huge depreciation costs ~~therefore~~. You
go out to build a new paint plant for 25 or 35 or 45 million
dollars, you've got to pay for that plant. ^{These} ~~These~~ old facilities
are already paid for. So it's just a question of how long ^{can} you ~~can~~
continue to produce economically at that facility and produce a

quality product, ~~that you want /unclear/~~. ~~You have to make the~~
~~decision /unclear/~~. Of course when we acquired Dutch Boy we
acquired some different facilities.

Pat: Baltimore and what else?

BT: ~~Of course~~ just recently they ~~just~~ acquired several facilities
from Desoto. I'm not familiar with those so I won't even speak
about them. I've been in ^{some of} them ~~and I've seen them~~ but I won't speak
about them. I guess in the paint factories, that's about it.

Pat: What happened at [Hubbard]? Was that a can factory?

BT: That's a can factory. Still is. We have can factories there,
[Emeryville], ^{Calif.} [Elgin] ^{Ill.}. ~~We sold [Elgin], we sold [Hubbard], we sold~~
~~the whole~~ can business.

WG: The sale was based on the idea that it was simply not good
investment any longer?

BT: I think basically that's what it was.

WG: ^{Where} ~~Where~~ there other consideration?

BT: Talk to ^{Emeryville} [Connolly /unclear/]

WG: Okay, just checking. I want to ask you a question getting at some of the big picture issues. We've been looking at, and you've been teaching us about making paint and paint operations but I get this sense that for many, many years, almost a hundred years, it seems like paint was a sort of, not a sleepy business, but there wasn't much turmoil in it. And it seems like in the last 20, 25 years the whole industry has really been shook up. I wondered if that was your sense of it and, if so, what were some of the things that were impacting on the paint business?

BT: I guess just competition, over capacity and price wars.

WG: Can you talk about each of those things?

BT: Marketing people could probably talk about them better than I can.

WG: Is there a way that this affected operations?

BT: We could never make it cheap enough. To that extent operations had to become even more efficient. There were times when our raw materials cost was as high as what they were selling it for.

WG: Now, when was that?

BT: Many times.

WG: Can you remember when it first happened?

BT: ~~Oh~~ I think that's something that happened periodically. ~~And~~
bid on large volumes
~~It~~ it was particularly true when we would ~~do big business~~. Traffic
zone paint, for example. By the time we manufactured the resin and
bought the chrome pigments and bought the inerts or titaniums or
what have you, the raw material cost was higher than the competitor
was selling it for. ~~So~~ *Somebody* had to be buying better, ~~Or~~ else
someone was using products that did not meet the specifications.
All kinds of ways that could have happened.

Pat: Did this mean that at any point that the quality, we're
talking house paints now, of the products went down because of the
crunch on manufacturing?

BT: No. Not because of manufacturing. You've got to realize
that, ~~the way~~ *manufacturing always produced from* from 62 to 70% of the cost of ~~the~~ *formally*
supplies the product is the raw *by the way*
materials and the container.

Pat: I meant because of the raw material. Because with the crunch
that manufacturing is between the raw material cost and what they
were asked, to make the paint, as you said they couldn't make it
cheap enough. Like in the '70s or something.

BT: Well, a penny saved was a lot of money. If you're making 60, 70 million gallons of product, a penny is a lot of money. If you could save a nickel, that's about 35 million dollars down to the bottom line. And that's the thing that we fought constantly ^{SAVING} ~~was~~ pennies. That's why the pressure was on the formulators to try to find a way to keep the same quality but was there another material that ^{could be substituted that} ~~put~~ into that product was a penny a pound cheaper or a nickel a pound cheaper. That's another reason why we went to larger batches because the way our accounting system works, when you manufacture small batches, it was very expensive, ~~for paint~~. But ^{as} soon as you started 1,000, 2,000, 5,000 ^{Gallon} ~~pound~~ batches, manufacturing ^{costs} were ^{reduced drastically} ~~practically nothing~~, relatively speaking. ~~So~~ Sometimes we'd make a 300 gallon batch and ^{we would have a} ~~then we'd fill a well with~~ six months' inventory. ^{Sometimes} you'd have to eat it because it never sold. That's the other problem.

WG: It never sold because.....?

BT: ~~Nobody liked it.~~ *I don't know, demand just dropped off.*

Pat: What about the perennial problem I kept hearing about not having a schedule so we ended up in July without white house paint or something like that? The whole scheduling during the winter.

BT: ~~Well~~ ^T that was a case of where you could not produce enough to meet the demand. We always said that you could make a batch every

12 to 24 hours. It was never a problem but every factory only had 20 tanks for white paint and if you have a hundred white paints to make and you only have 20 tanks to put them in then you can only get around to it once a week. So it wasn't a question of not being able to make it, the question was trying to satisfy a hundred demands and only having so many tanks to put it into. That was always the problem. Plus the fact that the high volume, because of inventory management, the stores could not begin to guess how fast it was going to move. The painter would come in and say, "I want 300 gallons of this," and he'd wipe him out. The next five customers ^{who came could not be satisfied.} ~~come in, and he's got no paint. By the time he gets it~~ ^{BT the branch was out of that paint,} ~~back in from the factory.....~~ ^{So,} we used to ship to stores once a month, ~~and you'd try to figure out exactly what you're going to~~ ^{the following} sell ~~next~~ month. The systems were not that good. Then we changed our ~~distribution~~ ^{shipments} from once a month to once a week. That was a difficult period.

Pat: When was that?

^{I'm not sure of the exact year}
BT: ~~I can't ask you that.~~ Fred [Ristok] can tell you. I would guess that was early '70s. ~~But then~~ this meant that the branch manager placed his order with the assistance of the computer printout. He would place his order on Tuesday and he would receive it every Tuesday morning, ^{for example,} ~~let's say.~~ Instead of one shipment a month, now he got four or five shipments a month. When we were on the monthly system he would have an emergency order every day. And

then he would get an order and he would find out that he didn't get this particular product, and so then he would reorder it and then reorder it, and ^{this reordering built up the demand} ~~and he wanted 50 gallons but quite often he might have~~ ^{and it could have triggered larger batches} ~~250 gallons on order for 50 thinking that way he'd get more paint.~~ ^{the stockpiles + computer print outs could conclude} ~~And then what happens is you'd take a look at this and say, "On the~~

~~German~~ man is tremendous, make 1,000 gallons." Then all of a sudden we'd start shipping and ^{branches wouldn't want that much} ~~he'd say, "Well, we don't want it now."~~ So then

we went to the weekly shipment which I think improved the inventory turns in the stores and it gave the factories ~~a~~ more realistic demand figures. ^{Under old system} ~~Because the other way we strictly operated on what~~ ^{a more average}

^{based on} we sold last year and what people think was going to happen this year. We say, "Well, let's increase it 5%, 10%," or ^{by a percentage} ~~what have~~ you ^{based on} ~~inventor~~ ^{and sales people's best estimates.}

WG: What had changed? Something obviously had changed to make the old system obsolete. Was it because paint was going on sale or people were buying more paint so that you couldn't simply say, "Whatever we did last year, let's just increase it 5%." I mean, the world had changed to affect operations in the factory and I'm just trying to get a sense of what that was.

BT: ~~Well~~, I think one thing that changed is, that we went from 300 stores to a thousand stores to 2,000 stores. That was a huge change. When you start putting 3,000 gallons of paint into a thousand stores that one thing, when you start putting it into 2,000 stores obviously the question is, "Can we get 2500 gallons?"

the result?

Through better inventory management. We spent a great deal of time and money on inventory systems and they're still using the same, probably modified, systems. The branch manager has more say today.

He early
In ~~these~~ days he didn't have any say at all, *except for emergency orders.*

WG: He was just shipped paint.

BT: He was shipped ~~that~~ *the* paint ~~and that was it.~~ *the system ordered.* He had the ability to return it if he thought he had too much. ~~They didn't have a whole lot of say so.~~ They are treated today more as an entrepreneur, as if it's their own business. They're held accountable for their return on their assets *employees* in pay. They weren't at that time. *their*

WG: We've heard in other interviews about the distribution changes. For instance, at a certain point Sherwin-Williams paint, I guess its the Kem family, correct me if I'm wrong on this, Pat, but it began to be sold in places like K-Mart and Uncle Bills', the discounters and Sherwin-Williams paint began to go on sale. People could buy it on sale and I'm wondering how did that whole change affect your side of the business?

BT: We shipped more paint to Uncle Bills' than we did to our stores.

WG: So was more paint being consumed?

BT: ~~Oh sure~~. Absolutely. Like I said when I came uptown in '65 I think the company was making maybe 50 million gallons and ~~like~~ I said in '68, *in 1968 we were planning for 60 million gallons,* ~~I was talking about 68 million in '68.~~

WG: But this paint was being sold at a discounted price than from what the paint had normally been sold at. Did that put pressure on your operations side of things?

BT: ^{X335}~~Oh sure~~. Every time they's run a \$3.99 sale they'd run out of paint but they would never order enough ahead of time.

WG: But did it put pressure on you from a point of view, "How can I make this paint and still make a profit on it?"

BT: No.

WG: Why?

BT: Because we shipped them the paint and they priced it the way they wanted to. Our goal in operations, we didn't worry about what they sold the paint, ^{for} ~~our job~~ was to produce that product with the quality that they wanted, when they wanted it, at the lowest possible cost.

WG: Has that changed now? Is there more attention given to the ultimate price that the stores sell it at or not?

BT: ^{well} ~~well~~, the manufacturing departments could lower their costs a penny ^a gallon or two cents a gallon or three cents a gallon -- that's ^{was a large} ~~a huge~~ amount. If it lowered their ^{were doing} ~~distribution~~ costs, ~~if~~ ^{and} ~~it lowered their~~ transportation costs, ^{these industries went} ~~each of these elements have~~ got to be all added up and we looked at each and every one of these ~~elements~~. It used to be that if a branch manager ordered a special truck, we'd spend \$300 to deliver it to him, and he didn't make \$300 on that paint. But he insisted he had to have it and he didn't pay the transportation bill. That was paid by transportation ~~up here~~ in Cleveland. That's different today. Going back to putting more responsibility ^{at the branch level} ~~out there~~. Manufacturing, regardless of what the sales department sold it for, ~~they would still~~ ^{would} do everything they could to reduce their costs. They would reduce their transportation costs, working with the sales department to try to see what we could do to improve on that. When we ^{shipped out} ~~went from~~ a ~~one~~ month delivery, that was ~~pretty cute~~ because we shipped everybody a ^{large amount} ~~truckload~~ of paint. They didn't know what to do with it. They didn't have any place for it. When we went to shipping to them every week, instead of shipping them 4,000 gallons of paint, we shipped them 1500 gallons of paint or 1200 or whatever it was. They could unload it easier, they could put it away easier. ^{they could unload their business much better} ~~They could have some free time~~. When we shipped them a full truckload of paint they had to go out hire three guys to help them unload the truck, meanwhile there's nobody out front. They were very happy to see this once a week delivery. What's that outfit out there in California? The one like the Uncle

Time in regard to buying in California, Standard Brands
~~Bills?~~ They built a plant in Texas. Not doing too well lately.
who was doing extremely well.
~~Standard Brands.~~ ~~When~~ I went out there and ~~looked~~ ^{found} what their
operations ~~were~~ ^{built} in the early '70s. They had a shed on the back of
their store and the truck driver had the key to the lock on that
door. At four o'clock every morning he would drop off 50, 60, or
100 gallons of paint, or 200 gallons. ^{Enough to replace what they sold the day} At eight o'clock in morning ^{before}
~~when~~ ^{before} they opened the doors for a customer the first thing they did
was they unloaded that shed and put everything away so they didn't
have any inventory in the back room. Everything was on the shelf.
~~so~~ ^{IN} when the first customer walked ^N he had every product in its place.
~~every morning.~~ Now that's every day. ~~now~~ they only had 32 stores.
That's the ultimate, I guess. But imagine going from a 4 week
schedule to 1 week schedule down to a one day schedule.

WG: It's like Just-In-Time. The Just-In-Time theory.

BT: Yes, you hoped you got it just in time.

WG: We'd like to get a picture of the company during the different
decades and wondered if there was any sense in your mind that the
different leaders of the company had a particular philosophy. For
instance, you were around during the Baldwin era. Was there
something that might have differentiated his approach from say,
Spencer? And then, of course, the Breen era we've got a better
fix on. We're pretty sketchy about those two decades intervening
and I wondered if you had any insights on how they affected your

part of the business or the business generally?

BT: ~~Well~~, I'd have to say that the Baldwin organization was not very dynamic. Under Steudel rules maybe less than that. I guess all they ever wanted to do was make paint. I remember we talked about it a lot of times that when Steudel came in had they turned around and had a real sharp technical person leading the company in the area of chemistry we could have ~~easily have~~ been a Dupont in the United States. ~~But~~ when I joined the company those decisions were long gone. And when a lot of other people joined the company that decision was formalized. Because we were in the chemical business, in the pigment manufacturing and a number of other things. So we just slowly got rid of those particular businesses. Rightfully, because we never had the economy of scale where we could truly compete. When you start looking where we are and where we've been and where we think we want to go those parts of the business, ~~they~~ ~~do~~ not fit. Trying to be totally objective, ~~unclear~~ ~~we~~ really never had any, so called, strategic plans ~~if you will~~. We started some of it but it was never carried out, never enforced, like it was finally when Mr. Breen came on board.

WG: Well you had the one in operations that you mentioned.

BT: I ~~guess maybe~~ ^{think} I probably put the first "Management by Objectives" program into the company. That was ~~probably~~ around '73 or '74. Every plant had safety objectives, costs, quality and

service. A number of plant managers didn't make ~~them~~ because they didn't meet ^{their} those objectives. ~~So I guess~~ I always felt that we were beating ourselves up but I'm not sure other people were beating each other up. ~~I guess they were, I knew they were, but~~ ^{I hoped they were} not in the same way. And then, of course, when Jack ^{Baker} came in there was no question about objectives. ~~I mean~~ ^{Previously} he just formalized the whole procedure. ^{and} Plans would be put together, they'd be put on the shelf. I don't think top management ever looked at them.

Pat: You ^{fixed operating} were a strategic plan ^{for} 1968. You knew about it but you were never held to that.

BT: I held myself to it. ~~But~~ ^{it} top management knew about ^{it} of course. I'd ^{review the plan at the} ~~unclear~~ because ~~we'd have~~ a board of operations meeting every other week. ~~And of course~~ Chicago was treated as a ^{division} company all of its own, and the general manager was considered part of the board of operations. ^{this plant represented 25% of the company's total output.} ~~So~~ he would come in from Chicago every two weeks. ~~Then~~ ^{we} we'd sit there and review with the marketing people, the purchasing people, everybody in the company at the corporate level. We would review what we'd done, what we haven't done, talk about what our problems were. Colin Baldwin once in a while would join us and then when Spencer became the CEO he was in those meeting every other week. That was ^{a meeting} ~~probably about a~~ 10 ^{people} person discussion. With all the key operating people, the technical people, the manufacturing people, marketing, the financial head of the company.

Pat: He would always be there.

BT: ~~Oh~~ yes, *if he was in town.*

WG: We got the sense from one of our interviewees that Spencer came on like a ball of fire. That people felt like he was really trying to change things. Was that your sense of it too?

BT: ~~Oh~~ yes. I think the thing that was lacking was the follow through. ~~and if~~ ^{*something*} it wasn't done then ~~somebody~~ ^{*had to go*}. I think that's one of the major changes. Nobody likes to let anyone go and every one waits too long. I waited too long, ^{*in some cases,*} but my feeling was I wanted to be as fair as I could be and if they want to criticize me for waiting too long, so be it. At least I didn't pull the trigger too quickly. My feeling was, I had to work with the ~~good~~ person to make sure that person had every chance he could have. ~~Because if~~ you can't help them then it's easy to fire somebody. I think that's ~~obviously~~ one thing that Mr. Breen does. He's probably one of the best trainers I've ever seen. People don't realize how much he's teaching them, just through his methodology of questioning. I don't think we had as much as that ^{*with*} ~~through any of the other of~~ the CEO's. It was very formal. Shirt and ties and ^{*we*} always ^{*wore*} have coats. Never went to a meeting without a coat on. Made sure your hair was combed, teeth brushed. You think I'm kidding?

Pat: No, I don't.

BT: There's one gentleman who ^{he didn't say} brushed every time ^{before} he went to a meeting. You know him very well so I won't mention his name. He's gone but ^avery interesting man. ~~So~~ I'd take my coat off and it didn't bother me. ~~But~~ ^{no} nobody kicked me out so I guess it was acceptable. But it was a totally different style of management. ~~No~~, Walt /unclear/ was a very capable guy, very intelligent. But somewhere along the line he lost it.

WG: Was it that he was out of touch?

BT: I don't know. ^{Walt didn't communicate very well.} I don't want to say anything ^{in operations.} [that you would put in there.]

WG: No that's fine. I mean we wouldn't put anything in print you didn't want us to put in print.

BT: If you want to know anymore about ^{the situation} it just read the ~~unclear~~. ^{local newspapers at that time - many articles were published including interviews with Spauld.}

WG: Let me just ask you this. When you look back over your career...

BT: I had a lot of respect for Walt.

WG: I was just asking to see what you thought about that period. It's okay. We're not going to put anything you don't want us to put in.

BT: ~~That's okay.~~

WG: When you look over your time with the company what are the things that really stood out for you; some great successes you had or things that made you feel great about working for the company? The times you were really on a roll for one reason or another.

BT: I don't necessarily get real highs. I ~~just~~ work day in and day out. ~~Some days /unclear/.~~ I ^{really felt good} think basically when the facilities met the goals that we all set, that the managers themselves set. Those things were accomplished ^{but} and we ^{were} never satisfied, ~~mark /unclear/ 100%~~. We couldn't afford to ^{be} ~~be~~ ^{we always} had plenty of house paint in the middle of winter. ^{The biggest high was} I think when we built the new facility in Atlanta, when we started the new facility in Richmond, Kentucky, ~~that had to be a real high for me.~~ The company never spent 25 million dollars for a paint plant before.

Pat: Which one was that?

BT: Richmond. I ~~id say~~ ^Q one of the low spots was when I had to put the emulsion plant in Chicago. ^{we had another site selected} I ~~had one place, then I was going~~ ^{in Indiana - he reserved but not built and it was} back. I had it back to where I wanted it then it went back. I ~~had~~ ^{finally settled on Chicago} it where I wanted it and it went back. I finally lost out but that's the way it goes. I wish that decision had been different today, but it isn't. ^T so the emulsion plant is still a good plant. It's probably in the best location it could be in except for the

labor force. And the fact that ^{WZ} they made an investment in the facility that, long range, isn't going to serve the company that much. ~~so~~ It's done. That's where management makes a decision, they override you. You still go along, it's up to management. ~~It's~~ ^{and has to always work} my philosophy, always been, ~~I've got~~ to make the boss look good. ~~Whether he's any good or not, I've got to make him look good. I wouldn't have a chance /unclear/. But, you know,~~ ^{are} new facilities in operations ~~were~~ always a great thing. When we started the trucking company I think that was a first for Sherwin-Williams.

WG: When was that?

BT: ~~was~~ That's when we started this weekly service to branches.

Pat: Is that when we started [CTF]?

BT: Yes, that's right. That was under ^{Bernie} ~~Bernie~~ Stevens at that time. We fought for ~~that~~. CTF.

Pat: In the early '70s you're talking about?

BT: I believe so, Pat. ^{CTF} And ~~that~~ continued to grow. We just couldn't rely on the trucking companies to do those things. ~~So~~ ^{that} ~~that was something that continued to grow. It's still there today.~~

Pat: Once upon a time, Mr. Sherwin's philosophy was to control everything so you would never be beholding to any suppliers or anybody else. Then we had the linseed oil mill and all those other things, and we made our own pigments and we made everything ~~that~~ we went into the paint, ~~as well as we /unclear/~~. Specifically, when did we sell the linseed oil mill and secondly, when did that sort of break down? When did we sort of start relying on suppliers?

BT: I can't tell you when we shut the linseed oil mill down but it had to be somewhere around '75. Somewhere early '70s. I could find that date out for you if you really wanted to know. Bob [Blank] who worked there could tell you. He still lives ^{in Brooksville.} ~~up there~~ in ~~/unclear/~~, ~~in fact I just talked to him.~~ ^{Ben White} The plant manager, he died not too long ago, six months ago. ~~/unclear words/~~ ~~But then we~~ got out of the pigment manufacturing in Chicago.

Pat: And that was...?

BT: That was probably late '70s. ^{the pigment operation became} That ~~became~~ just a huge environmental problem. ^{we got a} ~~And /unclear/~~ really small batch manufacturer. I think it may have been environmental reasons as much as ^{lack of profit} ~~anything /unclear words/ business.~~ The can business, of course we got out of that after Mr. Breen came in. We sold off ~~more of the business in saccharine,~~ chemical business as you well know. ~~/unclear/ information on that.~~ We never did produce latex. That's something that's ^{been} a running story for as long as I've been

around. There again it's a case of where we could buy the material cheaper than we could buy the raw materials to make it. So why make it? ^{We may have lost a technical edge since we never} ~~The only place where it probably is that we just didn't~~ ^{had} have any of our own special in-house latex products which would have give^{us} ~~perhaps, maybe~~ some better characteristics or edge on the competition.

Pat: Who did we buy it from?

BT: ~~Of course you know~~ ^{The} the old Kem-Tone was made out of casein. ^{we purchased the Styrene Butadiene} ~~And then after the end of World War II then they bought from~~ ^{Cater} Goodyear. They ~~bought the styrene latex.~~ ^{which} The quality of that ^{Super Kem-Tone was a greatly improved product with the later casein} material going into Super Kem-Tone was... we had a tough time trying to get them to change that but then ^{3rd technical} the latex technology ~~just~~ made ^{the Styrene Butadiene} humongous changes and it ~~was a very poor~~ ^{compared to the new Acrylates} polymer. ^{IT D} That was tough to change but we finally got Don ^{Kohler} [Coor] and Dr. Van Stone and some of ^{the other technical people} those other guys to start to use some of the other latexes and, of course, as you know, Rohm & Haas is probably one of the biggest suppliers. ^{THERE'S} ~~So that's~~ been a huge change in the latex ^{unclear} chemistry.

Pat: You've got to explain something to me, Bob. It's been explained to me before but I don't understand it. "Watermiscible." The first Kem-Tone was watermiscible but it wasn't latex.

BT: It was casein.

Pat: Casein. Which means it was... I mean I think of casein as being egg tempera.

BT: That's about all it was. It's filled hot and then closed up so that it wouldn't putrefy.

Pat: Was it, in fact, an animal protein?

BT: I think it was ^{a ~~little~~ protein precipitated from milk.} You'd have to talk to one of the technical guys. ^{added it to the batch hot and filled the old} because ~~we~~ ^{Solution} made our own casein, ~~and they disperse her hot.~~ ^{Kem-Tone} ~~I'm~~ ^{Hot.} not ~~exactly~~ sure what that casein is. ~~Talk to somebody.~~ All I know is that material could putrefy very quickly. I mean, you open a can of it and it ^{may have a rotten odor.} ~~was just terrible.~~ I mean it just smelled something awful. But we sold millions and millions of gallons of it. And in those days, before the war, that was real innovation.

Pat: What I wondered was, if you knew what the difference between Kem-Tone, which revolutionized everything and regular...

BT: It was basically the styrene ^{Butadiene} ~~unclear~~ ~~dye ink~~ polymer. Which was ~~a~~ man-made, I mean, they took styrene and polymerized it. They came up with a very long molecule. ^{This molecule was used as a substitute for natural rubber during World War II.}

Pat: But you're talking about Super Kem-Tone now.

BT: Right.

Pat: Okay. What made Kem-Tone, the first Kem-Tone different from a regular casein. Because there have been caseins around for...you know. Why was it so revolutionary?

BT: I don't know. Because ^{When} I came in '50 casein paint was on its way out. ^{Production} And Super Kem-Tone was in there so I never got ^{too involved} into the casein ^{Production} ~~one way or the other~~. They were still making some of it at that time as a ^{low cost} cheap product, compared to Super Kem-Tone, ~~but~~ then obviously ^{it eventually was phased out.} ~~it just went by the board~~. The ~~only~~ ^{our country} reason we started to do the dye ink was because ^{During} the war we couldn't get natural rubber and so Goodyear and ~~all the~~ other companies had to find a way to make tires, ~~and so then~~ ^T they started working on ~~these~~ various polymers. That's when the latex polymer technology really took off.

WG: Would you just say that slowly. Styrene, [butadiene] (spelled ^{STYRENE B. TADIENE POLYMER} by interviewee) polymer.

BT: Now there's ~~just as~~ many co-polymers, ~~it would blow your mind.~~
~~How's your coffee?~~

WG: ~~Need some more?~~

Pat: I'll go get you some. ~~I will go get you some.~~

WG: Would you like to take a break or do you want to keep going?

BT: No, I'm fine. I told my wife I'd meet her at 11 o'clock but I said for sure 11:30.

WG: Okay, well we'll finish up fast.

BT: Keep going. Forget the coffee. Sit down. We'll just keep going here because I didn't realize it's 20 after 11.

WG: Okay, ~~let's finish up~~. From your perspective, what challenges are facing the company?

End of Side 2, Tape 1

Beginning of Side 1, Tape 3

BT: I think from a facilities standpoint my feeling would be that they're still going to have to eliminate a number of the old facilities. They will have to be replaced, mainly because the transportation costs are so outlandish you cannot ship water all over the country and make any money. I'd say probably 60% of our product is latex. It may be that they still may have to look at what we looked at back in '78, '75, and years beyond that was that ~~possibly many~~ latex plants where they produce a very limited volume but at very, very high efficiency. We put that facility together a number of years ago but I guess I wasn't smart enough to sell it. We never did do it. The economics now might be to the point where something like that may be the thing that may be done at a very low

Cost we
cost. ~~Whether we can~~ afford to spend 25 million dollars for another latex plant or ~~another [four plant places]~~ *to* and produce 20 million gallons and ship it all over the country again. Again, that's where ~~the economics, that's what~~ *can* would dictate what ~~that~~ *be justified* might be. Over the years we've gone from decentralized to centralized and back to decentralized and I see nothing wrong with that. The economics dictate that. I guess I would think that somewhere along the line there's got to be some innovation in packaging.

Pat: In what direction?

BT: I don't think we can continue to ship containers, if you will, in four gallons or six quarts and twelve quarts and that sort of thing with all of the environmental problems that we have. ~~And we~~ *have* looked at this ~~also~~ *before* of trying to come up with some other kind of containerization.

Pat: The purpose would be...?

BT: Which would allow you to ship the products from warehouses to stores without the products being damaged but without stores having to ~~unclear~~ *of getting* rid of all that rubbish at that level.

Pat: Wow. What sort of things would that be.

BT: Shrink wrap. We tried that about 14 years ago.

Pat: Shrink wrap cans?

BT: Yes, ~~one~~. Pickup a six pack, right, and all you've got is a little plastic cover on top. They don't put those in big cartons, ~~or anything~~. I think it's an area which people are going to have to constantly look at. The biggest problem the earth has got is overpopulation, ^{and what to do with all the waste.} ~~the environmental problem~~. My hope is that I want ~~to live to be 100~~ because I want to see what God's plan is when the earth has got 10 billion people instead of just 5 ^{Billion} ~~unclear words~~. ~~Those are sort of some of the things....~~

WG: Bob, if you were writing the history, looking back over your time with the company, what would you pick out as the key events, turning points or important milestones in the company history during your period?

BT: Well there's no question about the improvement in the polymers that were made available to the ^{Paint Industry} ~~public in the paint industry~~. ~~Obviously~~ The improvement in the pigment manufacturing. The ability for it to be incorporated ^{easily} into paints. We've gone from a mixing, grinding intensive area down to where you ^{are} ~~just~~ basically ~~it's just~~ good mixing type operation. But it also makes it that much easier for ^a every person to get into the paint business in their garage. We still have over a thousand companies. In 1950,

1960 we had 1800 companies to compete with. And that, I think, is something that, as a big corporation, ^{we have to} it will continue to contend with. ^{many Paint Companies} Paint is very profitable. That's why it's so easy for everyone to get into the business. And it's much easier today. You can get all your formulas and everything from your suppliers. That's not saying that the quality is going to be as good as what the major companies have but 90% of the customers out there, if it works, they're happy with it. That will continue to be a headache. A big challenge. Marketing. There's no question about the marketing aspect of it, because, as you said, "What is the difference in all these products?" A good share of it is marketing. What's the difference between perfumes, what's the difference between powders, why ^{does} is one cigarette sell more than another? It's the way they take it to market. The perceived image, the perceived quality. Why do people buy Japanese cars? Are they really that much better? I won't buy a foreign car. Obvious reasons. But people perceive them to be of better quality. And I think that we have got to continue to impress on people that our quality is as good or better than anybody else's. There was no question about Super Kem-Tone. The product that ^{opened a new market} ~~unclear words/~~ ^{can refer to "DO IT YOURSELF".} world! ~~We've got to get that back.~~ We've still got problems, I think, in stores, getting people in and out of there. I was in a store not too long ago and I was patient but I saw two other people there, there was five people in line, and the people just put the product down and walked out. I don't know the answer to that. There are times when you'll have five people in the store and

2 problems
you've got ~~unclear~~. The employees were working like crazy but they only had one place to ring it up and ring it out. One computer operated machine. *each transaction to* ~~so~~ Everybody had to wait for that. ~~Now~~ *clear*
I was in a drugstore the other day, my wife and I went over to [Beachwood] ~~but~~ *she* was waiting in line to buy something and they had two clerks ~~back there~~ *handling the customers* and somehow the Visa card got messed up, the machine got messed up, ~~there was 6 people in line~~ *well* then we had three clerks ~~back there~~ *trying to solve the problems* then there ~~was~~ *well* 4 clerks ~~back there~~ and ~~there were~~ *finally* 6 people waiting in line, and finally two people just put the products ~~and~~ *down* and walked out of the store. I ~~guess~~ *those* things will happen but we've heard about this quite often. I don't know what the answer is. ~~I really don't.~~ *in our stores.*

WG: I know you've got to go, I just want to ask about pictures. Do you have any pictures of yourself say in various plants or company outings.

BT: Yes, but I don't give those out.

WG: You don't? Okay. Well I just wanted to make sure because we are collecting.

BT: I have some at home.

Pat: We have to think about illustrations for the book and if we're going to talk about manufacturing or talk about different

plants or something I've got formalized portraits that doesn't make a very interesting book.

BT: ~~Well,~~ ^{the ones I have} most of these are ~~probably~~ posed pictures. I mean, these are plant managers at a plant managers' meeting. ^{One was} I ~~guess~~ in Atlanta. That was the first time we ^{had} all the paint ^{Managers, Domestic &} people and ^{all} ^{Managers} ^{international} the chemical people and all the container people. We've got a picture of all the managers. ^{Together,}

Pat: What do you mean, the first time? It was the first time you'd all ever gotten together?

WG: We would like a picture of that.

Pat: When was that?

BT: Gee, I don't know. I just told you I think it's somewhere in the early '70s.

Pat: It was an Atlanta meeting and it was the first time?

BT: That was the first time that we'd all been together. I ran the meeting.

Pat: Manufacturing, and technical, and...

BT: No, I didn't say technical.

Pat: Oh, you didn't say technical. What did you say?

BT: It was manufacturing, chemical, containers, it was Spray on, it was all the operations, including international. And I think I have a picture of ~~that~~ ^{the Manager}. I can look through the pictures and get them down here sometime. I think Pat's searching ^{over the years} and ~~getting~~ all the information we've had around for years, trying to ~~unclear~~ ^{has allowed us to collect most of the important} words. ^{Historical information.}

Pat: That picture would be very ^{helpful.}....What did you talk about at this meeting? It was when you were VP of operation?

BT: Yes. I ^{Can not remember the details of this Agenda.} ~~have no idea what the agenda was.~~ I mean, I know it was very broad because we brought all the top ^{People} ~~guys~~ from all the various disciplines. Walt [Maynard] came down and talked to us ^{Industrial Relations}. He was ~~before Bob [Hendrickson] on benefits.~~ It was a much broader ^{Jack Skinner covered Benefits} based meeting than just talking about manufacturing paint. That was the first ^{joint meeting} ~~the company ever did it.~~ ^{Had} Spencer and I put ~~that all~~ ^{the agenda} together.

Pat: Why do you suppose it was never done before?

BT: I don't know. Well, I think they sort of kept the various operations and, for that matter, some of the various divisions,

isolated. But there was just so many common topics that pertained to all operations, it wasn't just paint factories, it wasn't just chemicals, it wasn't just containers, it was very broad based. I think that was one of the things Spencer brought, ^{with} a much more open type of organization where we actually communicated with each other. ^{at an inter division level,} It wasn't a question of everybody operating in a vacuum. And of course, as you well know, I'd say one of the highlights also was the fact that ~~when~~ Spencer divisionalized the company. That was very, very significant.

WG: How did that impact the company?

BT: ~~Well,~~ ^{we didn't carry it} It was the right decision, but ~~I guess like everything~~ ^{OK} else, the timing was wrong. The business cycle was turning down. But I don't think we got the maximum result out of it because, I'd ~~have to say,~~ ^{perhaps,} it was, more on paper than it was in fact. ^{The General Managers were still learning how to be a Division Manager.} When Breen came in there was no question about decentralizing and the divisions ^{taking on those} ~~having that responsibility~~ ^{unclear/}. I they didn't pick it up, they didn't get the results, they had a new division manager. I think that was one of the major ^{unclear/}. I mean, I used to forecast for the company ^{unclear/} operations should ^{unclear words/}.

Pat: When? When you were Vice President, when you were manager, when?

BT: 1967. I remember Colin Baldwin saying, "Well, how can you do this? You're not in marketing." And I'd say, "Well, if marketing won't do it I can't run 15 plants and not have a plan. So, that's it." /unclear words/ "Thank you, Bob." Never raised his voice or spoke very fast, but he was okay. ^{we had a} Good bunch of people ^{fair and ethical} as far as ^{business} ethical people. They were topnotch. If they weren't, I wouldn't be here. A different story.

WG: Well, we don't want to make your wife uncomfortable. ~~It's getting late.~~ Thank you very much.

BT: Well, if you need anything else.....

End of Tape