Oral History Interview

with

DEAN E. STEPHAN

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Laguna Beach, Cal.

By Michael R. Adamson

Adamson: We're at the home of Dean Stephan in Laguna Beach. It's May 20th.

In your ACI testimonial talk, you state that Mr. Pankow led, quote, "his organization out of Kiewit to form a new company." Does this mean he had established his own buildings group at Kiewit and then took its members out with him when he left Kiewit? And then how did he recruit others into his new company?

Stephan: He was running [the building group] in the Arcadia area office at Kiewit, and the area manager was a guy named Tom Paul, who's very famous in his own rights. Everybody liked Tom Paul as a construction person. I was a young engineer at the time working for Guy F. Atkinson Company, and I was aware of Tom Paul. That's how broad his reputation was. Charlie was running the building activities, and these were primarily warehouse-type buildings, a lot of tilt-up, smaller buildings. A kind of a general modus operandi would be it was a turnkey approach for a lot of the projects in that Kiewit would provide the construction financing. Upon the completion of the building and handing the keys to the owner, the paycheck [that is, payment for construction] would come out of a permanent financing that was put on the building by the developer. But to facilitate the sales, they [Kiewit] would do the construction financing for these projects.

So he had quite an active group, and that group eventually coalesced around him when the new company was formed. After he left, I think Russ Osterman was made the manager of the building division out of Arcadia, and he was in San Diego with George Hutton. Hutton would be an excellent resource of who joined when and all that. I think he and Hutton came in about six months after Charlie had formally split off.

Adamson: So the founding people of the new firm were Charlie and who?

Stephan: A fellow named [Lloyd] Loetterle, who I don't know; I've just heard his name over the years. George would know, and he would know who else went with him from day one. And that was the core group, with the exception of Ralph Van Cleave, who was not a Kiewit person, and was hired as a project sponsor and was the only outside person outside of the Kiewit group, other than the Accounting Department. The accounting people, they didn't have anything to do with Kiewit; they were all subsequently hired, [Jim] Body (CFO) and Doug Craker (Controller). Doug Craker started as an office manager on Broadway MacArthur (Oakland), and then he was eventually was a controller, and then they had the bookkeepers. That side of the company were all hired during those years, but the core group, the field people and the office management people, the people bidding the work and managing the work, were out of Kiewit, with the exception of Ralph Van Cleave. In 1972 is when a big chunk of us came into the company from the outside.

Adamson: Including yourself?

Stephan: Yes.

Adamson: You came in in what capacity?

Stephan: I came in as a project sponsor. What motivated that—the company's primary client was Winmar. In fact, if any entity built the company, it was Winmar. They were a very consistent client, a terrific client, that we did business with over the years. Their development aspect, their construction project and leasing aspect of their developments, was managed by a guy named Dick Brewer, who, unfortunately, just passed away about four months ago, because he would have been another great resource for you. He was located here in L.A. He complained to Russ that the company [Pankow] needed to expand its capabilities and they needed to have more formally educated people involved in the projects.[1] Charlie had a degree, Russ had a degree, George was over in Hawaii. Van Cleave I don't think had an engineering degree, and then the field guys—Bob Carlson had an engineering degree, but he was operations manager, so he was out in the field. So Brewer was agitating to broaden the base that he could deal with within the company at the level of expertise that he wanted to deal with.

So, at that point in time, the company hired—actually it was about four or five people all within a twelve-month period of time. Brad Inman and I were, I think—well, Jon Brandin lasted quite a while, but Brad Inman and I were kind of the two last survivors of the group. We [Brad and I] had met Charlie. It was interesting. Both of us were working for Atkinson, so was Jon Brandin; all three of us were working for Guy F.

Atkinson Company. Brad and I were down in Texas. He was the superintendent on the Dobie Center down there, which is a thirty-story building, and I was the project engineer. Charlie showed up at the trailer one afternoon—

[Begin Track Two]

Stephan: —at the trailer with Russ Osterman and a guy named Bill Carpenter. I guess it was about the second use of fly-forms [in high-rise construction].[2] We were using precast brick panels on the exterior of the building. We were actually putting the panels up down in the basement of the building and then hanging them like you would precast concrete. We'd been written up in *ENR*, and I had come off of the Kaweah Delta District Hospital, and we'd been written up on that job for the [structural] vaults that we'd used and the foam forming that we'd used. We'd done a lot of very unusual things.

So Charlie wanted to meet Brad and I. Bill Carpenter had worked at Guy F. Atkinson, so he knew us. So he showed up and took us to dinner and then after dinner suggested he talk to us one at a time. So I'm the one went with him first. Basically, he was seeing if he could hire us. Then Brad had breakfast with him the next morning and then we compared notes, and at that time neither one of us were ready to leave Guy F. Atkinson.

Subsequent to that meeting, Atkinson closed down their building division with the exception of Brad and I. They agreed to leave us in Austin because we had generated some follow-on work with some clients that we had met. They also agreed to let us form our own little construction company to do light industrial type of stuff, metal buildings,

on the side. So we did that for about a year and a half, and then I decided it wasn't going to go anywhere, so I came back [to California]. I called them and said I was ready to come home, so they put me in the Freeway [Highway] Division in Long Beach. I'll never forget, it was a real eye-opener, because I went to a [bid] letting. I was the courier to take in the number [that is, the bid], and there must have been fifteen bidders on the job and all of them except us, except Atkinson, were joint ventures. So I looked around the room and I said, "My god, there's huge overcapacity in freeway work." This was towards the end of the "Great Freeway Build." This is the start of the seventies.

So I'd got back after that [experience] and I called Charlie and said, "Remember me?" [laughs] And so that's how we got together. At that point in time, he also hired a number of other people, so I think I probably hit him just right. That's when one guy went to Spokane because they were developing an office building up there, a captive project. Brad ended up in San Francisco. Gosh, I can't remember where some of the others guys were. Some of them didn't last very long. But anyway, we brought people in. That was kind of the first time there was an injection [of employees outside of the Kiewit group]. So that was about ten years after Charlie split off [from Kiewit], because I think he started [the company] in, what, fall of ['63], I think.

Adamson: Let's just stick with your career path then for a minute. From there, you eventually, according to the ENR Top 400, you became vice president at some point and then president?

Stephan: Yes. Well, I was a project sponsor in the Altadena office, and I primarily took care of Winmar, the Winmar account, and we did a lot of jobs around the country for Winmar.

I know one of your questions says, "How did you gear up?" Well, we didn't gear up. We ran it very much on a project basis. So each project was set up as its own company with its own purchasing, its own everything, in the various locations where we would go to build these jobs for Winmar. So, anyway, that's what I did.

I joined the company in '72, by the way. In '78, I think I became a vice president of PBS, Pankow Building Systems. We'll talk a little bit later about the company's structure because I think it's more complicated than what I think you understand. So that was my first title. Then in the early eighties, I effectively became the chief operating officer for the mainland. Hawaii ran very independently. There was not much interchange of people, there were some, but not a tremendous amount, and Hawaii was a self-contained group. They had their own Accounting Department, and there's a little history to all that, too. That was set up about the time that I had joined the company, because Carlson and Body had been sent over there because apparently there'd been some problems with some of the projects and they were sent over there to help get it organized and straightened out.

Also right around '84, we went through the major company reorganization where we actually changed from one corporation to another corporation to a partnership. The whole incentive was to provide a workable mechanism for distributing ownership of the company, is why we went through it. Because what was happening was very, very apparent by the early eighties was that Charlie, Russ, and George owned 85 percent of

the company and the company had grown so much that [it was difficult] to buy into it. (I personally invested more money in the company than Charlie did. I happen to know the numbers because I had access to all that information, and I think I had one percent of the company. We didn't take vacations for years. Every spare penny I had, I bought stock, and the company had a plan to facilitate that. You could [buy stock by borrowing the purchase price under] five-year notes at imputed interest.)

It became very apparent that it was going to be impossible to perpetuate the company under this kind of structure. The ownership was too concentrated, and there was no way to disseminate it. So when Reagan's tax laws passed in about '82, there was a provision where you could collapse companies without a tax consequence and then reformulate them, and that's what we did. Our first effort to reformulate as a corporation again was imperfect, and we discovered some problems with it, so then we went to the partnership format, and all this took place over about a two-year period of time.

Mike Svergola [phonetic] was the lawyer primarily involved. Tim Murphy got into about the last six months of it, and Tim would be a good source of some of the details of all that. At that point in time, then we were a [limited] partnership and we had—let's see. The partners were Charlie, Russ, George, myself. I'm pretty sure that's it. We were the vehicle to pay the taxes. There were no benefit of being a partner other than under a partnership you have to have somebody pay the taxes because the functioning entity doesn't pay taxes.

I forget when I became president. It was on the night of [Charlie's wife] Doris's birthday, because we were at the California Club with Charlie and Doris when he said, "Okay, you've got the title of president." Bear in mind, titles in the company didn't

mean anything, so to be anointed president didn't mean that it changed what you did tomorrow; you'd been doing it anyway. Unlike a lot of companies, which are highly structured, we were highly unstructured and very, very fluid.

George Hutton was president of the company for a period of time, and I didn't even know he was president of the company because he never had anything to do with the mainland, just like we never had anything to do with Hawaii. In fact, the people in Hawaii that worked for George were far more loyal to George than they were to the parent company, far more loyal, which created problems off and on.

Anyway, I'm rambling.

Adamson: No, that's great. I noticed in ENR Top 400, I went through the whole run and I noticed that George for two or three years was listed as president, and then it was the mid-eighties, so maybe it was this interim period.

There was an article in the *Los Angeles Business Journal* in 2003 that stated that the company, quote, "offered small company intimacy in large company capacity," unquote.[3] How did Charlie Pankow and others shape the firm's culture and develop its organizational capabilities?

Stephan: I didn't have any notes on that one. It was a very ad hoc company. I was shocked when I first came in. There was no estimating system. I remember I went to the first negotiation with Russ [Osterman] on a contract with Winmar and—I'm not sure I'll tell the full story, but basically they were writing numbers on the back of an envelope.

Russ would say, “Well, you know we did this last building for this much a square foot, and we’ve had inflation, so the price ought to be this.”

Dick said, “Oh, no, we’ve got leasing here and you know leasing rates have been drying out [that is, falling], so we can’t afford to pay more than that.” They arrived at the price of a building, gross footage known, type of building known, where it was to be located known; that was it. Because I’d come out of Atkinson where we had an estimating department, we’d did quantity surveys, and we had elaborate systems to come up with unit pricing to apply to all this. This was prior to computers, so a lot of it was by hand. But I was absolutely dumbfounded, and I couldn’t function that way. So I had to, at least for me to price buildings, I had to start developing a system of estimating and keeping track of costs.

But what would happen, they [Dick Brewer and Russ, to follow the above example] would get [that is, agree to] a price. Bob Carlson [the operations manager] would sit down with the superintendent on the job, after the job had started, and they would sit there and he would bring along technical reports.[4] Have you seen the technical reports?

Adamson: Not yet. I saw the drawer, but I didn’t have a look inside.

Stephan: That was our cost history of the company, was technical reports. So if you were going to price a job, you would get one or two similar jobs out of the file. Or if there weren’t any similar jobs, similar work increments that might be common to jobs, types of work, and that’s what you used for your cost records to figure out what you bid.

They were always in dollars, so one of the first things I did was insisted everybody go to man hours per unit because were working in New York, and we're working in Wisconsin, and wage rates are not the same, so dollars don't make any sense. Dollars fifteen years ago don't matter today. So, anyway, there was this—but Bob Carlson would go sit down with the superintendent, and they would negotiate what they called the control estimate, which would then become the cost control for the job, for the LDRs and the JCRs, the Labor Distribution Report, which was weekly, and the Job Cost Report, which was monthly, which included materials. And that's how they managed it. I mean seat of the pants, give me a break, but it worked, it worked. Particularly because we weren't doing very many jobs. You know, two or three jobs a year was a big deal.

On the salvage projects, we did have a better definition of what was being built so it was a little easier to get your arms around what you were doing. But the Winmar jobs, it would be we want to build this big an office building, etc., etc., and then we'd price it and then we'd go generate the plans. That evolved to a little more rigorous system later, but initially that's basically what it was. So we had a very ad hoc structure.

Reporting: I think for the first five years I worked in the company I never said more that five words to Charlie. Charlie would stick his head in the door and, very embarrassed, would say, "What you working on?"

I'd say, "Not too much here, Charlie," or this or that, and I was embarrassed talking to him, he was embarrassed talking to me, and that was it. There wasn't a lot of reporting. When I started doing tenders, I'd sit down with Russ and say, "Here's what I think it should be," and some justification, and that was kind of my reporting channel, but it was very, very informal. The field all worked through Bob Carlson.

It was a very informal structure that evolved. Titles didn't make any difference. People did what they could, and the good thing about it was you didn't get boxes drawn around you. You weren't an engineer, grade one, like at Bechtel, and to a certain extent like at Atkinson, where here's your authority and here's your box, don't bang the edges. There [at Pankow] it [the culture] was: "Do what you can do best and go for it." That's how the company started growing and evolved in its structures.

I think Rik probably is really the first guy that's actually introduced a more structured organization. I don't know, because I'm not in the company anymore, but I suspect that's true, because up for years we were just very, very fluid. People would move back and forth and what have you, so titles didn't mean a whole lot.

Adamson: So to do more jobs per year, you had to become more formalized?

Stephan: Yeah. Yes. We had to become more systemized, and you ought to get Bob Law to tell you how I harangued him to set up an estimating program for years. Get him to haul out some of his old Christmas letters. Every Christmas bonus letter, I would harangue him about getting estimating more organized.

But, yes, that was correct, and we grew primarily by hiring brand-new engineers every year. We did have this stated policy of we're like a professional football team. We draft the best players that are available, whether we need them or not, because we'll find a use for them. So that's the way we grew, and guys like Joe Sanders, their career paths were mercurial because they joined the company and three years later they had very responsible positions within the company because nobody drew a box around them and

we had tremendous need for people that could perform. We hired very, very few people from the outside, from other companies.

Adamson: So you took them straight out of school?

Stephan: Straight out of school. I mean, [Chris] Turner's an exception, Norm Husk was an exception, but by and large, they came right out of school.[5]

Adamson: What qualities distinguished Charlie Pankow as an entrepreneur?

Stephan: I don't know. What do you mean?

Adamson: Well, he went and started his own company.

Stephan: Right.

Adamson: Was it just driven by his desire to build buildings or, I guess, I'm getting at how once he did that, how did he handle running a company, being innovative in his field? Did he have a vision of—

Stephan: Well, I joined the company in '72, and I would see Charlie maybe once a month, so I really wasn't aware that he was running the company. We're maybe like a platoon in the Marines. We were a very small group, very tight knit, all working for each

other and covering each other's back, and we really didn't have a colonel around telling us what to do. That's very much the way it was. So I was really, frankly, pretty much unaware of what Charlie was doing most of the time. In fact, Charlie had a standard policy that his location was never to be revealed, even to his own wife, because he was often in South America or out gallivanting around the world somewhere and he didn't want people to know it. [laughs]

Adamson: So I guess the second part, what would his style as manager, would be hands off?

Stephan: Hands off. He let you achieve your maximum. He did not artificially constrain you, and it worked. You know, I'm trying to think of why it worked. I suspect we could—and we did have some bad experiences, like the group that got hired with me, a lot of them washed out, and that was kind of, you either succeeded or you left approach to management.

Adamson: You mentioned Winmar and doing jobs for them around the country. Was that basically how the firm ended up opening other offices, or was that separate?

Stephan: No. Do you want to go to that question? I think it was back a ways, was it?

Adamson: Yeah. I'm looking at the "How did the firm handle expanding?" but we can—

Stephan: Well, wait a minute, let me stay with your outline because I've got some of my—okay. So how did management organize to handle with the expansion of the firm geographically? We did it on a project basis. As we would go to these various cities, we would set up a self-contained company with its own purchasing. We basically gave the superintendent a bag of gold and told him to bring back a bigger bag. As a sponsor, I'd go into town and I would have to identify the subs, and the sub market. Generally you start with the ready-mix people and then say, "Who are some good subs?" You'd go to the Yellow Pages, you'd sit in your hotel room and you'd interview people by the hour as they trundled through.

We'd function very much as a self-contained company at each location, with the exception of the central accounting. Each job had an office manager who did all the project accounting and then furnished the information into the main office. So it was set up on a project basis. Then the history is different for each thing. Hawaii, George went over there on a salvage project, Campbell Estates Building, to run it, and it was organized on a project basis. He built the building, and he's got a fabulous story. I'll tell it to you and get him to tell it to you, too. Basically, he had the building done, and Charlie's over there and he says to Charlie, "Well, where do you want me to go next?" He's worried about his next employment.

Well, Charlie didn't have a job to send him to. He says, "Why don't you stay here, George, and see what you can develop."

George says, "Okay. How do you do that?"

[Charlie says]: "I've got to go catch an airplane, George."

But George did it, and you know, that was probably the best management thing Charlie could have done. I mean, Charlie could've gone and given him ten ideas, a list of ten things to do, and he could've trundled off. He didn't. [By not giving specific instructions or supportive action], he [basically] said, "George, figure it out. Make it work," and George did, and that was the underlying thesis of the whole company.

San Francisco. Why did we have a San Francisco office? Well, the first jobs in the company were up in San Francisco. Why, I'm not 100 percent sure, but they were. So we had a San Francisco office. Plus Charlie has had, or had, a lifelong love affair with San Francisco.

Then we set up at one time this office in Spokane. That was early on. That was more in conjunction with the building that he and Russ Osterman were developing together. Outside of the [company's] construction activities, there were these—what we called captive projects, which were primarily projects that then involved George, Russ, and Charlie [as owners] doing private development.

Then we did try to set up an office in New Jersey, and this was prior to my joining the company, and we built a little Oxford Press office building in New Jersey. It was just some guy who apparently was fairly charismatic, but he didn't work out and got let go.

And I can't think of where else we—oh, we tried San Diego. Tom Verti went down to San Diego. We had a series of projects lined up down there. Our hope was to set up a San Diego office on a permanent basis because they were a little provincial, but again, that ended up not working out, so we closed down that effort.

Our handling of expansion geographically, we expanded geographically in response to our clients' needs. We didn't go out and pioneer a market [other than Hawaii].

Another situation would have been we were going to send Rik Kunnath down to Atlanta because we'd bought a piece of land in Gwinnett County and thought we might be able to develop it. And then we were never able to put that together so we never sent Rik down there. If we would have been able to put that together, we would have tried to maintain him down there to set up a Southeast office, like George did in Hawaii. But as far as I know, George was the only one that was able to successfully set up a remote operation.

Adamson: So Pankow, the firm, has always operated as general contract management, that's basically been its business?

Stephan: That's all I'm aware of. When PBS was first organized, Pankow Building Systems, it was carved out as a separate company to do prefabricated metal buildings. That market never materialized. This was back in the sixties. That market never materialized but we kept that corporation, and that was when we ended up hiring the A&Es. [That is, PBS was the entity used to hire the consulting architects and engineers.] And as far as I know, we always operated as a GC.[6]

Adamson: When the company appeared in ENRs Top 400 for the first time in 1966, it listed the areas of business as heavy construction and highways, which was what Kiewit

apparently was doing. But then the next year and thereafter, the area of operation was always buildings, mostly commercial. Was some of the early work actually highway construction and bridges?

Stephan: No. The first job was MacArthur Broadway. It's [an office] building [with a retail] area. [The company] never did any of that [that is, heavy construction or highways], and that MacArthur Broadway was done as a JV (joint venture) with Charlie's father's company, [Ralph] Sollitt, out of the Midwest.[7]

Adamson: I saw the San Mateo Bridge project listed Kiewit as constructor, and I was wondering if Charlie had anything to do with it.

Stephan: Oh, yes. He, in fact, I think both [Ralph] Tice and [Alan Murk]—well, for sure Tice was on that job, and that's where they used the precast pile system. Charlie went down to Texas and saw a precast piling operation, pre-stressed, hollow core, precast piles. It happened to be patented, but [when Charlie] came back, and that's how they produced the piles for the Hayward Bridge, the first Hayward Bridge. I know Ralph had great stories about all they went through to make that work. Ralph was always a little concerned that we maybe shouldn't have been doing that with somebody else's process.

Adamson: I'm going to skip the next question until after our break because I have a chart to show you that maybe you can comment on it. But has the company been successful from day one, as they say?

Stephan: As far as I know. The only project that seemed to cause major disruption within the company was Pacheco Village, which was completed shortly before I joined the company. I had gathered that financially that one wasn't all that attractive.

Adamson: So it's an employee-owned company. Was there any consideration of going public at any point?

Stephan: Not that I'm aware of.

Adamson: Do construction companies in general stay private, sort of Bechtel? I know Fluor has gone public.

Stephan: Granite went public from private. It makes it hard; it's much easier to stay private. I know that when Turner [Construction Company] went public, it was very traumatic because then they started to be driven by profit forecasts on a quarterly basis and everything else. If you watch some of these big companies that are public, well, take Chicago Bridge and Iron, where my dad worked his entire career. They get slugs of contracts, and so you'll have years of high revenues and great profits and you'll have years of low revenues and low profits, and that [cyclical nature of construction] is very difficult to manage in a public company [environment]. In a private company, you don't worry about it.[8]

Adamson: Has the firm made any acquisitions?

Stephan: No. And the only consideration, the one that I was aware of, is that George at one point in time, probably in the late eighties, proposed that we buy an Alaska company that he was aware of. I know we had quite a discussion about that but did not go forward with it. My feeling was very strongly: What do you buy? You buy some receivables and what else? In building construction, you didn't have a lot of equipment. It isn't like buying an Atkinson where you have forty-five scrapers or Kiewit where you have tons of cranes and stuff. So what do you buy? You buy a set of receivables that you don't know how good they are. You don't know if the projects [underway] are going to make any money or not, and you hopefully can retain the people but you have no lock on them. So I was never convinced to go buy another company made a lot of sense, and my experience with joint ventures reinforced that because I never felt—when I went back to Syracuse, New York, with the Penn-Can Mall to put that together, we joint ventured with a company called Bouley [William E. Bouley Co.].[9]

Our bonding company said, "Gee, New York, you ought to have some local [partner]." So we said okay, who should we talk to, and they said talk to Bouley, we [know] them, they're a good company. I mean they didn't contribute anything, we ran it like we did everything else, and I think that's the only time, until we did stuff with the Japanese for an entirely different reason, that we did JV because it didn't enhance our performance at all.

Adamson: So I'm jumping. So when you do design/build competitions, there was an expansion of Boalt Hall at Berkeley and the article mentioned that it was a joint venture with Ratcliff the architect, is that a different sort of idea of joint venture?

Stephan: That's a different sort of idea, and I'm not familiar with that.

Adamson: Okay. You had an article you wrote shortly after the Kansas City building disaster (Hyatt Hotel failure), if you want to call it that, where you discussed the role of the constructor in building projects.[10] How did Pankow see itself as a role of the constructor, and how did it distinguish itself from others?

Stephan: I went on the chicken circuit on that. ASCE asked me to chair one of the committees who took a look at the overall thing, which I did, and then out of that came the quality manual that the ASCE came up with. Then I went with Charlie Thornton and about three other people on this fried chicken circuit. All over the country I gave speeches on the manual and how it fit into the practice of the constructible project, and I presented the contractor's point of view. So, that's a very long story and if you want some of those speeches to see how we felt about it, I can certainly give you the speeches. We would just waste a lot of time to try to do it right now.

Adamson: That would be great. In a 1984 article and on the company website, it basically talks about how the firm hires outside structural engineers and architects for each project.[11] The website's saying that Pankow performs as much work as possible

with its own forces but does not retain architects and designers in-house. So the question is what tasks have Pankow performed historically on projects and how did it come to that breakdown?

Stephan: Well, let me back up just a little bit. Under design/build, there's two ways to approach it. At a lot of design/build firms—in fact the guy that started the Design/Build Institute, I can't think of his name, down in Florida has an in-house staff, Parsons has an in-house staff, Jacobs has an in-house staff, Bechtel has an in-house staff of architects and engineers, and so they do everything internally. We did not have that. Number one, when we started, as a company, there's no way in the world we could afford that kind of overhead. It's a very difficult animal to manage because you have to have a lot of bodies to do that.

So we always made the speech that we would hire the right architect and right engineer for the type of project to be built for the owner rather than try to force it through an in-house staff that maybe did refineries one day and office buildings the next. And so that was our speech to clients. The real underlying motive was that we didn't want a huge in-house design staff. We had no way in the world to manage that, and I think in the long run it served us very well to be able to tailor our A&Es to the demands of each individual project. Now, we hired a lot of the same firms because some firms we worked with better than others, but we did not do that in-house.[12]

So what we did as a company with our own forces, is we did the [concrete] construction side of the work. So we did the concrete [work with our] laborers, and we had the carpenters to do the forming. On very few projects we did the reinforcing steel.

In fact, I can only think of one. Generally we subbed that out. We had operating engineers, which operated the cranes and the compressors and that kind of stuff. We had cement finishers who finished the floor slabs, and we had the laborers who placed the concrete. So we did the basic structural components with the exception of reinforcing steel on the concrete buildings. On the structural steel buildings, we would only do the [concrete foundation and concrete floor] toppings. The structural steel and metal decking and all that was done by subcontractors. So that's what we did on the projects.[13]

During the design phase, the project sponsor was heavily involved with the A&Es, providing overall direction and coordination to the design. We did not usurp the architect. That would've been a fatal mistake because there are a lot of egos involved in that. So the architects always ran the meeting and stuff, and I think some of your later questions provide the opportunity to talk a little bit about how that worked. But for the design aspect of it we provided the guidance, but we did not perform the designs.

Adamson: So then, building initial working relationships with developers and architects and engineers was just out of one project to the next?

Stephan: Yes, that's exactly right.

Adamson: How did the firm develop and market its business? You mentioned on the phone when we first talked there were no brochures that you knew of, or early on.

Stephan: Yes.[14] When I first joined the company, there were no brochures because it [marketing] was Troy [Ed.: Stephan meant to say Ralph Van Cleave] and Russ [Osterman].[15] It was really Russ who was scrounging up the work and [he] just didn't have it [a need for a brochure]. Plus we didn't have a huge backlog of projects to showcase. So when we—I was called by an architect [who had done work at the University of Southern California to inform me that] SC came out with a design/build RFP (Request for Proposal) for a parking structure on campus. This was in the late seventies. (I'd have to go to Tom [Verti]'s summary list [of company projects] to get the dates, but I think it was the late seventies.) One of the requirements [of the RFP was] that you had to submit a brochure. So I had to make a brochure and that was our very first brochure. It was made in response to be able to respond to the RFP. Because [prior to that time] we would go to a sale situation or a marketing situation, really a marketing situation, and we would have what we called the little fliers. So we had one-page fliers [really, magazine articles] on projects we built. So you'd gather up a bunch of similar projects of these little fliers that had information on them, put them together, go down there with some *ENR*—we planted a lot of articles in *ENR* and *Building Design and Construction*, what have you, as a marketing technique and we put that in there. We'd go down there and here's what we do and here's why we're neat and here's some of the cool things we do.

I'd often do a slideshow showing slipforming and some of that kind of stuff if I could get enough time to do that. But, no, we did not have formal materials like we do today at all when we first started, and a lot of our capacity on the mainland was consumed by Winmar anyway. We couldn't go out and build. When I first joined the

company I think we could run maybe three jobs on the mainland, something like that, simultaneously, that's probably about it.

Adamson: So the website today states that, quote, "Repeat business comprises the vast majority of Pankow projects." If you read that back, historically what was the, say, tipping point of that? At what point did the company start relying on repeat business more than having to search out new work?

Stephan: Well, the company was able to rely on repeat business almost from day one.

Adamson: Because of Winmar?

Stephan: No, others. You know we did the MacArthur Broadway, and then we did another building, what, First & Alameda [in San Jose, California] or something like that for that owner three or four years later. But Winmar was the main [client], but we did a number of repeat jobs. We had, I think, a very sincere feeling that we were to be an asset to our developer, that we were there to create value for him. They appreciated that, and we didn't fight about it [the contracted project scope of work], and we produced, and we got our buildings in on time and for the price we said we were going to do them, and so they came back. Expanding our customer base was long and hard, and we had to beat down a lot of doors, because the design/build [project delivery system], particularly then, wasn't all that accepted.

Adamson: Yes, that's the theme that I've gathered from reading the trade journals. I asked Bob Law the next two questions, and I think you've sort of already answered it yourself about how did these sort of outliers, building in Milwaukee and projects on the East Coast, coming about? Bob had mentioned—I think he had mentioned Winmar, too, in the case of East Wisconsin Center.[16] Was that typically how these projects across the country came about?

Stephan: Yes, that's correct. We went at the behest of our client. We did those jobs in Kentucky for Winmar. We would've never done those buildings in Kentucky without going there with the client. In fact, let me give you how 411 Wisconsin was put together.

Adamson: That'd be great.

Stephan: Winmar called me, and they said, "We have just reached an agreement with IBM, and they want to lease a given number [of square feet], I think it was [that is, resulted in] about four floors or something like that [in the final building design], in a building in Milwaukee, Wisconsin. We've located a parcel of land. Can you guys put together a building? And this needs to be a statement building." That turned into be, I think, about forty stories, or it came out that they wanted a certain height—or a certain number of stories because we actually took height out.

So we said, "Yes, we can do that." So we put together [a design team]. We got Welton Becket.[17] We'd done a lot of work with George Hammond and Art Love, who were in Chicago in the Becket office there. So we sat down, and Art was a fabulous

designer, and came up with some great ideas for the thing, and we basically gave them the parameters. Here are the spans we want, here's the materials we want to use to build it, here's some of the ratios we want to maintain.

Now, I don't know if Bob [Law] told you or not but there's a very key ratio of exterior skin to floor area. Your floor area's important because that's what produces the revenue. Leases are based on so much a square foot usable, and so efficient floors are great. You can't get too much building exterior for the revenue-producing portion of the building, the floors, or you're never going to make the building work [financially]. I don't care how cheap you make that exterior, or how cheap you make that building, it's never going to work. So, we gave them those basic boxes [that is, parameters].

This is why I loved working with them because the really good architects were fabulous because they could take these basic set of rules that we had worked out over the years on spans and materials and some of these basic ratios, and they could come up with beautiful buildings. We didn't dictate the designs. I know some of the questions [Ed.: questions that Adamson sent to Stephan beforehand] kind of said: "How do you really balance cheapening a building versus"—we sold beautiful buildings. We sold very similar to architects. We didn't sell like a lot of other builders. We sold dreams to people. So when we're sitting down talking to a developer, who is generally who we sold to, we wanted a set of buildings that looked great.

In fact, we rued the day that we used the same molds on [buildings in] Eugene and Spokane because that created a bad reputation that we just did cookie-cutter buildings and that's how we produced them [for such attractive prices]. But those two buildings were owned by Charlie and Russ, and they wanted to get the benefit of using

the same mold. We reveled in the fact that our buildings were different. Some architects couldn't respond to that [parameter guidance]. You know, they weren't that creative. But the really good ones were fantastic, and they really loved working with us because rather than the buildings staying on paper and never being built because they had no relationship to the market, ours always did.

Winmar told us, you got to bring it in for this much because that's what the leases were going to support, and we want a statement building, can you do it? So we worked with Becket, and we came up with what we called schematics, which was a presentation set, bundled them all up, sat down in Winmar's offices, said, okay, here's solution one, here's solution two, here's solution three and ta-da, here's what everybody's supposed to fall in love with. We didn't make the presentation, the architect did.

But each and every one of those solutions, we knew ahead of the fact that we could do for the kind of budget we could shoot for. Otherwise we'd have never presented them. It's the worst thing in the world, you don't want someone to fall in love with something they can't build, and that happens time after time after time when architects show a beautiful building to a client, "Oh, yeah, you can do that." No way, it's never going to happen and it's sad when you see that happen. That's when you get salvage projects.

So that's how that building went together, and so they said fine go do it. So we did what we called Exhibit B, which was supposed to be a direct extension of Exhibit A, which were the schematics plus outline specs.[18] We put a hard number on that building on probably eight sheets of drawings and an outline spec that called out the materials that are going to be on the walls in the bathrooms and all that kind of stuff.[19]

From that day forward [that is, when Winmar approved Exhibit A], Winmar always knew what they had to lease that building for [because they knew the building's design and construction cost]. They are the ones that decided the returns they wanted to make. They decided what the construction budget needed to be. Their question to us is: "Can you do it? Can you run the race?" Sometimes we could. Sometimes we couldn't. But we never take cost out of the building or something like that. That didn't play, because we always started from: "What do we need to do to make the building work?" We never really took cost out of the building. We always started from an approach that would give us the cost we needed, which was very different from the way a lot of people [operated]—and it's very different from value engineering and all this other kind of garbage that goes on in the industry.

The owner knew what he was buying. He didn't care about [how you achieved the end result]. You got to do scratch coat, then you got to do brown coat, then three days' cure or seven days' cure and then finish coat. All he wanted to know was that this was wall going to be out of plaster. That's all he cared about, so, yep, that's a plaster wall. Or this is a paneled wall. Or this is a decorative wall. Or this wall has got stone on it, and we're going to work with a stone allowance of $4.25 a square foot, because the stone won't be picked for six, seven months from now, and so—but they knew what they were getting. They didn't need all this huge set of construction documents [detailing how everything was going to be built], because they weren't going to build the building. We needed them. They didn't. So anyway, that's how that building went together, and that was kind of a typical, a purer than most, example of design/build.[20]

Adamson: I have a friend—I think he's a lawyer in that building.

Stephan: Oh, at 411 Wisconsin?

Adamson: Yes. That's where I'm from originally.

Stephan: Ah.

Adamson: So I know that building, even before I came to this project.

Stephan: Were you there when we were building?

Adamson: Well, I was living there, but I don't know.

Stephan: We blew the city away because we worked through the winter, because we brought it up with us.[21] [laughs]

The thing, I think it was forty stories, but they wanted to be *the* statement building in town, whatever the number was, but say it was forty, was what you needed. Well, in the whole process, we had come up with a framing system using spread planks where we could take out about a foot a floor, and so our building is not as high as a normal—it had a twelve-foot floor-to-floor rather than a [more common] thirteen, six [that is, thirteen foot, six inch], and so it wasn't as high as you might expect for that many stories, but it was really in a very efficient building and it met that particular criteria they were after.

Adamson: Interesting. You mentioned that joint ventures weren't a common way of doing business, but in the case of the Metropolitan Water District headquarters, an article I read mentioned it was a joint venture with Catellus.[22]

Stephan: Catellus [pronunciation].

Adamson: How did those arrangements work?

Stephan: Well, I mean of the joint ventures I'm familiar with are the Bouley one, which is a straight up and down, two construction companies building the project, which was a waste of time. Then we had our Catellus joint ventures, which was a joint venture between the person who owned the land and ourselves to produce a building built to suit for who would be either a purchaser of the project or a tenant of the project. So that, the impetus there, was this guy's got the land, we can produce the building, so we'll team up.

Our part of the joint venture was to produce the building for an agreed number. Catellus was selling land and the building with an agreed number to the person buying the building, relying on our construction number, which they didn't participate in, and we didn't participate in their land sale. But they needed that hard number on the construction side because they presold the project. So that was a joint venture. That's a land[owner] and builder joint venture.

We had a series of joint ventures with Japanese companies, and there the Japanese companies were providing financial investment to make the project happen, and there

they actually did have people on our staff. We did have a typical JV structure with the joint committee and management committee and all that, and we shared in the [project management portion of the] construction. But the work that we did [with our own forces], we always did as a subcontractor to the JV, so when we did our own concrete work, the Japanese couldn't contribute to that.[23] So we did it as a subcontractor to the JV, and that aspect of the work, its profits or losses stayed with us, and then the JV had its overall contract structure with the owner. Those were the three types [of joint ventures].[24]

Adamson: A 1995 article in *Pacific Business News,* I noted that Pankow had set up what it called a tenant improvement group for the purpose of retaining relationships with owners and subcontractors.[25] How well did this work? Was this Hawaii, or was this somewhere in California?

Stephan: No, no. The TI started up in San Francisco, and Rik is the best guy to talk to. The only observation I had on this was what actions you'd taken to sort of smooth over rough times.[26] San Francisco was having rough times.

The company was doing just fine. For fifteen years, all the money that was made in the company was made out of the Altadena office, and I retired in 1997—I don't know.[27]

The company probably won't reveal it, but we used to produce every year sheets, and it was the outfall [of the Hawaii/mainland relationship].[28] Hawaii kind of got a big head at the end of the eighties, because it was booming like mad—I mean not the end of

the eighties, the end of the seventies and into the [early] eighties. The general perception was that they [Hawaii] were carrying the whole company, and there were some real problems with that because the guys in Hawaii had more allegiance to George than they did the company. There was the distinct possibility that that whole group might say ta-ta, and there'd been no way [to prevent that]. As far as the world was concerned, in Hawaii, Pankow was George Hutton, and Charlie Pankow didn't exist. He rarely even went there.

So to combat that, and to get a little broader understanding of the company, Charlie started producing at the annual meeting a little sheet that was passed out to the unit holders that gave the three—gave San Francisco, Honolulu, and Altadena, and the history of the profits over time to bring a little better perspective to it. Hawaii was a cornucopia of projects and profits in late seventies, early eighties, and then, of course, the Japanese [investors] left, so it [that is, the Hawaii office's volume and profits] fell off. From about '82 forward, Altadena was by far and away the big producer.

We grew the company. When we collapsed the original company, we regrew our company that size [in terms of net worth] in just short of or just a little more than ten years.[29] That's how fast we were growing. [I remember this] because I had a bet with Charlie. When we collapsed the first company, we kind of got into some discussions about how we were going to do the ownership and what kind of vesting periods we had and stuff like that. It got a little heated at times, so I bet him that we could grow the company to the same size within ten years, and I think I lost by about two months.

Adamson: Is that right?

The website indicates that Pankow's Special Projects was established in 1991. I think that's the name of the San Francisco group today.

Stephan: Actually, they're in all the offices.

Adamson: Oh, they're in all the offices. Okay. What factors spurred the creation of the separate group, and what did special projects do?

Stephan: Well, it's basically it started out as a tenant finish group. Rik Kunnath hired Wally Naylor. San Francisco had not produced any work for a lot of years, and at the time, very much to Rik's credit, he had a tremendous foresight to do this. He hired Wally Naylor, who brought with him an organization and contacts and everything else, and hit the ground running doing tenant finish work in downtown San Francisco. Then they expanded the tenant finish work to Hawaii, and then I got it rammed down my throat in Altadena, and that's an accurate phraseology. Rik was pushing it very, very hard to Charlie, that the whole company should be doing this. He didn't have any work going on out there [in San Francisco]. In Altadena, we were chockablock full with shell and core work. I mean everybody was just busting their fanny. We were stretched. And you can only push people so far and as project sponsor [you] can really only affective run two projects, one in design and one in construction.

Any more than that, you're going to compromise. He's either going to kill himself or you're going to compromise his performance. So we were chockablock full, and we had a rather lively discussion about doing it. I fought it because I did not want to

have to manage a tenant group when I had all this other stuff going on, and we were the golden goose of the company. We were the only people making money, and so I fought it very hard.

I lost, fortunately, but what evolved by about '95, the tenant group in L.A. had done a few things, not too much. Wally Naylor was a very successful operation. Another fellow Rik [Kunnath] hired had had involvement and experience with the medical community, so we started doing a lot of little labs and stuff in hospitals, because this guy had all the contacts. That was somewhat successful.

Hawaii was an unmitigated disaster. But about '95 we really had to have a come-to-Jesus on this thing. Maybe it was '96, right in that timeframe. [Dick] Walterhouse can tell you 'cause he'll remember the name. I went to Charlie. "Hey, Charlie, we're taking more work on only to lose more money on this tenant stuff." Because I'm tired of supporting it. We're going huckle-dee-buck, and we've got all this money going out the door. We've got to do one of two things. We got to either shut it down or we got to carve it out as a separate company. Put Walterhouse in charge and see if he can make something of it. And if he can't, at least we'll have something we can sell, so that's what we did.

I'll never forget. I sat down with Dick and I said, "Dick, it's your baby. Here's the rules. If you make it a success, it's your company, your baby. If it's not a success, we're going to try to sell it." And he jumped at the chance, and, thank god, the company had that, because I think it carried the company through the early part of the nineties.[30] Everything I've gotten on feedback [after I retired is] that that's how the company survived, was off TI, and Dick did a wonderful job.[31]

Here's a company that was trying to use—when we were losing money on it [the TI group]—they were trying to use systems that were designed for shell and core work projects that lasted twelve to eighteen to twenty-four months. They're doing work that lasts four weeks, six weeks. They're burdened with all this [inappropriate] accounting program. They're burdened with all the subcontracting rules, all the bonding requirements, all this stuff that the shell and core group was structured with. And Dick, to my never-ending admiration, rationalized all that, put it all together, hired people we'd never heard of from backgrounds that would have never been considered in shell and core and built an organization from the ground up.

From the absolute ground up, from how they reported their cost to how they did their contracting, all of that. He and Kim [Petersen] worked mightily on that. Now, most of that was done after I was gone, so I don't know all the details of that at all. But I will tell you it was phenomenal, and I'm glad that I lost that argument and I'm glad Rik had the foresight to get us into that area of business, because without it, I don't know if the company would have made it through the [late] nineties, because there was a long period of time where we just didn't have any work.

Adamson: This is an outgrowth of recession generally or just timing?

Stephan: I think a number of things. You'd probably have to ferret that out. I wasn't there.

Adamson: Okay. A couple articles I read, and the Web site, I think, mentions this, that Pankow handles permitting and reviews, attends hearings and performs other functions associated with project approval. Is this something that is more recent, or has Pankow historically done these sorts of things?

Stephan: No, no, we've historically [did this]. I just insisted that the—I learned it as a project sponsor, that I better know the building code better than anybody else on the team, architect, the building inspector, the plan checker, anybody else. I better know that code better, because I was going to be the one to say, "We're going to build this Type 4, noncombustible. Mr. Architect, here's what we're going to do, Type 4, noncombustible, go design the building."

I better know what that means, because it's going to have—I'm going to be the guy paying for it if I don't, because we'll have pre-agreed to a price [for a code-conforming building] and have a problem. So I just insisted that people go to the plan checks so that they knew, and I insisted that they read the codes and understand [them] so they could help the architect. It's amazing how few architects bother with the code. I mean it's just not something they work on, because they never have cost responsibility for it. If they design something that's outside the code in a particular area and they go to plan check and they get a comment on it, fine, then they make it comply. It doesn't cost them a nickel. The owner's getting the design done and there's no cost attached to it until it's all done.

If you're doing design/build and you're telling an owner you're going to give him this building in accordance with code, you better know what that code is and you better

make sure that your commitments financially conform to that code, because if you go to a plan check [and] you [get] a plan check comment, that could cost you a lot of money. [laughs] So, it ain't going to cost the owner, because you've already agreed to the price, which is the huge difference between design/bid/build. It's the contractor [who] takes the responsibility.

Adamson: Right.

Stephan: So, yes, we've done that for a long time.

Adamson: This next question is actually inspired by a couple articles I read about Hawaii projects, and it talked about long tussles about land use. Did Pankow ever get involved in these sort of strategic issues long before projects were approved?

Stephan: Minimally, during my tenure, minimally.

We would often, primarily Winmar, we would often support them. Like in the 411, we went to all the zoning hearings on that and we would make presentations and kind of address issues that were raised at those hearings. But that would be the extent of it. Normally during my tenure, we did not get heavily involved with that aspect of it.

Adamson: Were these slow-growth or no-growth movements in California and Hawaii greatly affecting of the business, or was it just something externally that you had to respond to?

Stephan: Just something external we had to respond to.

Adamson: On the fortieth anniversary of Pankow Builders, Tom Verti stated that Charlie Pankow organized the firm so that it would continue after he was gone.[32] Can you elaborate on what Charlie Pankow—

Stephan: Well, that's the whole thing is when we went from a corporation—when the tax law changed, we went from a corporation to a corporation that was imperfect and then to the partnership structure, which worked absolutely beautifully. The original stockholders were paid off. There were three of us there—yes, four of us, who had to leave our holdings in till we had sufficient financial capacity to bond the new entity. But other than that, the old company was dissolved and paid off, and then we started the new company from financial zero ground. That was the ten-year bet. It took them twenty years to get there, and I bet them we would do it [again] in ten.

So that was the—

Adamson: When did Charlie step down from his executive positions?

Stephan: Well, see, I never—

Adamson: Or did he ever?

Stephan: That's not a germane question.

Adamson: It's not a germane question?

Stephan: Yes, because it really wasn't run that way. Charlie always very much set the corporate culture, which was a tolerance and encouragement of innovation. He wanted people to work independent. He did not provide detailed supervision to people at all. Failure could elicit draconian repercussions, like getting fired, but it—so I never thought of Charlie as having executive positions.

Adamson: Did he ever retire completely?

Stephan: Well, I was gone, see, when he was still there, and I would be very surprised if he wasn't still behind the scenes pulling the strings to a certain extent until the day he died. Rik and Tom can answer those, because I think they went through some very interesting experiences, just as I did.

[Begin Track three]

Adamson: You've mentioned that in Hawaii, George Hutton did not take a design/build approach to the business but was successful nevertheless. Can you elaborate on that and how he—

Stephan: Yes, I think George would agree with that analysis. He certainly didn't endorse it to the aspect like we did 411 where we had somebody walk in the door and say we want you to build this much for that much, can you do it? But he was very successful, and he was very successful because they had technical innovation on their projects, and they also had the culture of performing. But he didn't contract for the work in the same fashion.

Then in the later years in the eighties, the projects turned into almost exclusively captive projects, so George and Charlie and sometimes Russ, I think—but anyway, those were probably the ones—would be the actual developer of the project. Now, for all practical purposes, once you do that you are, in fact, doing design/build. But they just didn't approach it like we did.

I think Rik, since he's worked in both locations, can probably give you some insight into the differences of how the projects were handled and put together in Hawaii versus the mainland. His first job was Windward Mall in Hawaii, and he participated with me. It was a Winmar job, and he participated with me in working with [Victor] Gruen's office here in California, how we were going to build it, etc., etc., and then took the project to Hawaii and he was the superintendent on that, on the job, and then he stayed and worked in Hawaii for several years. He can probably give you the best comparison.

All I know is George used to tell me at the annual meetings he thought we were nuts the way we were doing business. [laughs] But they were innovative, they were determined, they were applying slipforms, so obviously buildings were being—designs that were coming on the buildings lent themselves for some of the techniques we wanted

to use. We did not do much precast. I remember Tony Giron went over there to help them on their first job where they had precast concrete because they didn't get into that. But they did a lot of fly-forming, a lot of slipforming.

Adamson: In our remaining time, I want to get to the questions on design/build and technical innovation that I think you can speak to. I asked this question of Bob Law. What are the origins of design/build in America, and how did Pankow become the first or one of the first firms known for design/build?

Stephan: I think it grew out of salvage projects. You know, we went through the 1930s and the 1940s and very little was built. First you had the Great Depression, and then we had World War II, and there was very little civil infrastructure construction. You didn't build office buildings and everything. All the materials went to the war effort. Of course, during the Depression, there wasn't the money to do anything, or the demand for any of that. When you entered the [late] forties and the fifties, you had this huge pent-up demand for the type of structures we did, the commercial structures. I think demand at that point in time concealed the inefficiency of the system of delivery, which was the pure, simple design, bid, and build. The reason why it could, it really didn't make much difference what the buildings cost, because they were going to be leased up instantaneously because everybody needed space. Economy was growing, and you could afford these huge inefficiencies.

Then we got into the late fifties and into the sixties, and that's when I started my career, so I experienced some of this, first in the Navy and then in Guy F. Atkinson &

Company. The cracks started showing because now there had to be competition between buildings [for tenants] whereas before just get a building there and you're home free. Now, well, who's going to build the building because who's going to come up with the best rents? So the cracks started showing, and that's when you first started hearing about construction management (CM). You started seeing a lot of pressure on cost, so a lot of general contractors started going away from lump sum contracts because it was getting way too competitive. They were getting beat up by owners. Owners now were suddenly starting to care what things cost and we had this massive movement, primarily driven by CM, to shift the [cost] risk to owners. This caused problems for owners, because now they're building buildings they can't lease, or they're leasing them at rates that won't support the capital investment. So these cracks now are starting to show pretty bad.

That's when we started seeing these salvage projects, which are projects that a guy would spend at that time $500,000, a lot of money, on a set of plans that couldn't be built because it didn't respond to what was available in the marketplace as far as returns [on investment] went. You couldn't lease it. You'd have to charge too much. So we would get it as a salvage job.

Now, you get this—number one, you got the owner who's already in love with that solution, but is now desperate, so you have to go through the pangs of giving it up, and you then got to go through the whole process all over again because you're not going to get there by changing the toilet paper dispensers. You're going to get there basically how you put the whole building together, with the structural component being the major single key because it's the major single [cost] variable. So you do a few salvage projects, and then don't you scratch your head and say why am I redoing all this? This is pretty

inefficient. Why don't you guys just come to us to start with, and we'll produce a building that can be built for your kind of budget, or we'll tell you that we can't do it. Don't waste all your money to find out you can't do it.

We, of course, extended it that not only would we do that but we'd give you that number upfront, so before you closed your financing, before you closed your major leases, you know what your building's going to cost. It isn't a pin the tail on the donkey anymore. And, by the way, this is not construction management. You don't have all the responsibility. See, under the construction management concept, the GCs were driven because of competition to get out of taking risk because they were losing their shirts. So they transferred that to the owners by having the owners be responsible for sub [subcontractor] spreads, and you got into these—eventually guaranteed maxes came in to try to put some kind of cap on it. But when they [construction managers] started, they didn't even have guaranteed maxes. So the contractor would work for some miniscule management fee to get on the phone and call sub X and tell them to be there on Wednesday versus doing any of the work himself. He didn't have any ability to the control the cost, and he really never had a stake in the fire. He's just out like an architect or engineer working for a fee, and if it doesn't work, no skin off his back.

So that's what kind of precipitated the growth of design/build. Now the design industry didn't like it because it treaded on the toes of egos. The architects were used to being the fountainheads of everything, and they really didn't like somebody in there saying, well, now maybe—and we learned pretty quick that we didn't say you can't do this. We learned pretty quick we better tell them the basic parameters to do it in, and then they could go off and be creative.[33] But if we allowed them to be too creative before we

gave them the parameters, then there was sometimes a problem [in terms of "pride of authorship"].

That, I think, is kind of what caused the evolution. Really, construction management was the darling of the industries in the sixties and seventies. Design/build started because of the weakness in construction management because the cost responsibility of a project was put in the wrong place. Owners couldn't control it, and so for us design/build made a lot of money—a lot of sense. I can remember talking about it just in amongst ourselves. We said, "Boy, once this catches on like CM, we're going to be in big-time trouble because people are going to blow it. They won't know how to do it," and of course, that's what eventually evolved. Pretty soon in the eighties, late eighties, nineties, they had architectural firms claiming they were design/builders. Well, they didn't have a clue what anything cost, they didn't have any idea how to control cost, but they claimed they could do it. Then you started getting a lot of failures with design/build, which was unfortunate, but you knew it was going to come.

Did that answer your question? I rambled a lot.

Adamson: I believe it kind of touched on a couple, so I'm just going to try to rephrase this next question to you. You mentioned in the 1984 article that Pankow had become involved in design/build because the firm had felt it was necessary to have input during the design stage to make the best use of experience with the most recent construction techniques.[34] I guess my question is what is the relationship between this approach and leveraging the recent construction techniques?

Stephan: Well, it kind of gets back at it. We want to be an asset to the owner. If we've got a better way to build something and accomplish the same function, we ought to get that introduced into the design. Under the traditional system, you get a set of plans thrown over the transom, lands in your arm, here's the one and only way to build it, and any suggestions. Certainly you're not authorized to do anything that's not shown on the plans and any suggestions to change something is reluctantly received by anybody.

So we tried to introduce the technology into the design process upfront, so we could, in fact, be an asset for the owner so that we could come up with a building that was more attractive financially and functioned the same and gave him [the owner] the same result that he wanted. Often you couldn't do that unless you got it put in the design. If they designed the building in steel and gave you the set of plans and said build me a steel building, that's what you built. But if you recognized that, say, in this particular case in this particular type of building, this particular use of it might be more efficient to build it out of concrete, then if you got in on day one and said we're going to build it out of concrete, [that decision] didn't make any difference to the designer. I mean the frame's holding the thing up. Nobody sees it. But, yep, we could be of real value to the owner because—in fact, an interesting story that I think points it out.

When Donahue [of Donahue Schriber] approached me on the mall out in Riverside, Tyler Mall, I think it was, he said, "We want to double deck it. We want to double deck this mall." He said, "We want you guys to do it."

I said, "Well, who's the architect and engineer?"

He says, "We'll hire somebody to decorate it after you decide how it's going to be done," and he was dead on. He was dead on, and that's exactly what happened.

So that's what you want to be. You want to be that asset, because you want to make that project happen for the owner. So that's what I was talking about where we could use new technologies, and if you're going to do some of them, you need to introduce them into the design process or you need to then get in there.

Adamson: In 1994 an article in *Building Design and Construction* stated that, quote, "Controversy's no stranger to design/build competitions, and in this case the Pankow firm was one of three to lose out on a convention center in the Waikiki Beach hotel district."[35] So I'm wondering if you can comment on what factors make design/build competitions controversial and how often did Pankow approach work through design/build competitions?

Stephan: Not that often. We did some design/build competitions and they were some key ones, and there were some morphed competitions, like the MWD building. They put out an RFP for a building, including a site. So we competed with that, and that's when Catellus was our partner. But we did some competitions, but not that many.

I don't know why they were necessarily controversial. I looked in my records to see if I had that old white paper. I sat on ASCE's committee to produce a white paper on design/build. It's probably in the late eighties. Because within the industry there was this idea that design/build was controversial, that you had the fox guarding the henhouse, the nasty old contractor's going to steal the owner blind by cheapening everything in sight.

The risk of that exists, but that's not the way we did it because we'd have never sold another building. We wouldn't have repeat work if we would have done that. We sold buildings because we sold performance. But that [reduced quality] was a real concern [within the design professions and to owners].

It was interesting, because in that meeting the Navy was there, and the Navy, even at the time I was in the Navy in the sixties, had started using design/build for their non-appropriated work, their EM clubs, their officers' clubs, their Exchanges, and that kind of stuff where they used non-appropriated funds to produce a product, because they had recognized in the Navy that there was a real problem with this design, bid, and build, and they ending up with cost overruns, etc., etc.[36]

So there was a Navy captain on that same committee, and he was one of the most vocal advocates for design/build, because the Navy had very good history of it. The Army guy, on the other hand, thought it was the worst thing that was ever going to happen and viewed [invited] controversy. The only thing that I think creates controversy is that the award becomes subjective. If you have four bids, it's not too hard to figure out who's got the low number. That's not subjective.

But if you've got four designs and you have four different prices, you have then the whole concept of most for your money, what's the most pleasing aesthetically, what gives you the most facility, what gives you the best bells and whistles for the money, and that then becomes subjective, and I guess that's what makes it controversial.

In that particular project, I was involved with that, not majorly, but I was well aware of it, and I was over in Hawaii a number of times. I think we deservedly lost it. I didn't care for our design. Our design stunk. [laughs] But we were brought into it [that

is, the design/build competition] by the architect out of Denver, so we handled it. That's the way it went.

Adamson: Bob Law suggested that design/build took a while to gain acceptance because a lot of people were calling design/build and weren't really design/builders, and it got some reputational problems. Is that how you would explain?

Stephan: That was the concern that I talked about. We used to sit around and talk about that, because when we were one of the few companies doing it, and we felt we were doing it right, and we weren't creating problems for our owners. In fact, we were working strictly in the private sector, very seldom did we venture in the public side.

We knew once it got more and more accepted, that we were going to get the flakes in there that would screw it up, people that weren't capable of doing it, claiming that, you know, stamping that label on their forehead because they could sell the job. And that's what happened.

Adamson: Was this white paper you just mentioned an attempt to—

Stephan: The white paper was an attempt to placate the civil engineering community—structural engineers and civil engineers—about the ethical parameters of doing design/build.

Adamson: I think you've touched on some of these questions. I want to ask you that the 1973 statement by the General Services Administration Administrator Arthur Sampson that construction was the worst managed industry in America.[37] I thought the timing of this was kind of interesting, given the trajectory of the Pankow firm. Was this something that Charlie Pankow and others like yourself were conscious of, and was it something that you played off of in selling design/build as a better way of doing things?

Stephan: Well, yeah, we sold design/build as a better way of doing things, and it was broader than the worst managed industry in America, because it was a—that was really dealing with a delivery technique, not an individual how do you manage architectural firms or how do you manage construction firms. But, yeah, I think we would have agreed with him that the industry was very poorly structured and that's what the area we were selling, change the structure. It was basically poorly managed because of the lousy structure.

Adamson: So is project management the driving factor behind selling design/builds?

Stephan: I don't know what you mean by "project management."

Adamson: Selling yourself as being—taking responsibility where—

Stephan: I would call that risk management. I think one of our primary selling tools to owners was that we take the risk because it's appropriate for us to take the risk. We're the ones controlling the costs, so we ought to be the ones responsible for it.

Adamson: So you had mentioned construction management. In that case, the construction manager is just a coordinator—

Stephan: That's correct.

Adamson: —of the project without taking on risk?

Stephan: That's correct. In its truest sense. You know, there's shades from here to Sunday. When it came aboard originally, they were basically selling a management team to schedule and coordinate the work, period. Owner had all the cost risk. Owner didn't—I mean he had no way to do the work, control the cost or anything else. I mean it was ridiculous, but the industry sold that very hard and heavy, and it was because of all this cost pressure. Companies were going to go out of business unless they started doing that kind of stuff, so you got in on all this cost-plus type of approach to work.

Adamson: If we take Southern California as a region, who were Pankow's direct competitors and how did Pankow distinguish itself as an innovator among them?

Stephan: I don't know. I was never really that aware of competitors. I mean obviously there were a lot of companies that were building commercial buildings in L.A. We generally didn't cross paths with them. We were so early into projects. We were into projects at the conceptual stage. They generally came into projects at a bid stage, which is generally eighteen months later. So we didn't cross paths too much. Once in a while we would, but we really didn't too much.

Adamson: In the testimonial dinner talk you sent me, you observed that Charlie Pankow saw that concrete offered, quote, "the greatest opportunity for innovation and creation of value," unquote, in buildings. Was this part of a trend in the 1960s, or was it Pankow out ahead of others?

Stephan: Well, first and foremost, ACI stands for the American Concrete Institute. I certainly wouldn't talk about steel buildings being great before an American Concrete Institute audience, right, so that's—

Adamson: That's part of it.

Stephan: —that's part of it. But the underlying idea is if you're going to do, say, a structural steel building, you're dealing with off-the-shelf, predetermined pieces. So you have a span of a beam. You figure out your loads, design your beam and it has a certain section modulus. It has to have a certain—I don't know if you know what a section modulus is, but it basically has to have certain physical characteristics weight-wise,

depth-wise, with the flange, all this and there's tables of standard shapes that are rolled, and here's their section moduluses.

So, okay, you come up, you need a section modulus of 35.2, going down your table, okay, 36. Okay, that's the first one that's greater than what I need, because you don't want to go less, and, okay, there's maybe a couple, three of them that have 36s. Now, I'm limited by my attic space in the building. I can't be more than 28 inches on my structural members. Okay, oh, here's a 28-inch one and it's got a 38 modulus, but I can't go any deeper than 28, so I've got to go to a higher modulus. I've got to buy a heavier beam.

So, okay, put it in your building. Because it's all predetermined and off the shelf, you don't have much opportunity to tailor the thing to what you actually need to do. Now, in a concrete building, it's entirely different. You have a beam. Do your loads, okay, now I'm going to design my beam and actually manufacture it on the job to exactly suit what I need. So I'm not buying this thing that's 15 percent more or five percent more or seven percent more than what I need. I now have the opportunity to design for exactly what I need. Plus, since I'm going to build it on the job for this project, if I want it to curve, if I want it to start fat here and go up here, I can do that. I can't buy that off the shelf, but with a concrete building, I can.

So it offers tremendous opportunity because you're actually manufacturing your structural member right on the job. So you have a lot of flexibility in what you can do, so you have a lot of room for innovation and how do you hook them together, how do you do all kinds of things.

Does that make sense to you?

Adamson: Yes. This question is a bit—just throw it out there. In the—I was an architecture major.

Stephan: Oh, good.

Adamson: That's why [laughs]. In the 1980s, architects moved from—

Stephan: So you know what a section modulus is, so you know what I'm talking about.

Adamson: Right. When they moved from the modern glass and steel structures to more post-modern, more eclectic, sophisticated designs, it just struck me that this move and use of concrete, I don't know what—it's kind of a chicken and egg question—but was the trend toward using concrete something that architects picked up on in their building design and construction, or is this something they picked off the shelf, or was concrete promoted as something they could use to build these—

Stephan: Well, it's certainly a tool, and it was a different tool than a curtain wall system. But you have two basic things. You have the actual building frame, and your building appearance in large measure is—the frame and the appearance are not related. I mean they function together, but you could have a concrete frame or you could have a steel frame and nobody would know the difference. You can't look at a building and say, huh, that's got a concrete frame or, huh, that's got a steel frame. Can't do it.

What kind of happened was that we had the Seagram Building, and that was the great step toward modernism where it was simple, functional and everything else, and that was the start of the explosion of the architectural profession's enamoring with curtain walls. At the time, actually, it was a pretty efficient, economical way to build a building. But like all architectural trends, and I'm sure you're aware of this because if you're student of it, that they get way overused, and so what started, suddenly now fifteen years later is ending up in these flash cube buildings, which are god awful, and curtain wall is being put on everything.

Now, how many different things can you do with curtain wall? Very limited. And curtain wall, which started out to be an economical solution, has now become a very expensive solution. They didn't actually move to concrete exteriors. The next big evolution, the next big genre of architecture, actually went to stone, to granite, and we had the great burst of granite buildings everywhere. Everyone wanted to stick granite on their building, and, of course, there were a couple buildings nicely done and everybody said, "Wow, I'm going to do that." Granite, when it first started, was an economical solution, and now, of course, granite is a pretty expensive way to plan a building.

So I don't see the movement like yours, and I don't think that impacted one way or another our use of precast concrete on the exterior of buildings. In fact, we often would preach to the architect that this frees you up. You aren't dealing with a piece of PP&G glass that comes in four different shades. You can make this thing look like whatever you want. We just don't want it [the precast concrete panel] any bigger than this. We want it to be able to form the columns, but that doesn't affect your appearance.

You can do anything you want with it. Sculpt it. Pretend you're—and we used to plead with them because it was amazing.

Once they were given the opportunity to be creative, so very few of them could respond. They really couldn't, very, very few of them, and you just—I can remember preaching to a guy, sculpt it. Pretend you're Michelangelo, man, and I'll figure out how to build it. You just do what would make that building sing. Most time you get the same solution that you've had for the last ten times. I mean it was amazing how they couldn't respond. Some did, but more often than not, they didn't.

Anyway, so that [precast concrete panels] kind of plugged along all the way, and we were never impacted one way or another about the fascination with curtain wall versus stone versus [concrete]. We had a way of putting together office buildings that used precast concrete panels that was very efficient, and they could be very attractive buildings, and they didn't—one of the things we used to remind clients when we'd sell them, was you didn't make a statement in time. One of the great arguments you can make with your clients, let's go to lunch. You'd go to lunch, you'd start pointing out, now when was that building built, when was that building built, when was that building built, and when was that building built? You could tell them because the architecture was the architecture common in that six-year period of time.

We'd say, "Now, with our building, can you tell us when this was built?"

"Huh-uh." I mean these were structures that were unique. They weren't the genre of the moment. So we would preach that. We said, "You're not going to date your building. You're not going to wish you didn't have this building years from now." Well, anyway, that's just part of our sales. Whether it's true or not is another thing.

Adamson: Bob Law gave me a spreadsheet of buildings and technical innovations associated with them and sparked the question what's the relationship between design/build and the technical innovations that Pankow's come up with, getting at are some of the engineering innovations, such as the precast hybrid moment frame, is that something independent of design/build or something that grew out of it?

Stephan: Well, that was dear to my heart since I'm the one that developed that. But let me talk about the other things before. A lot of things that we claim innovation for, they've existed. Slipforming, basically, was something that came from Europe, and Europe was the one that pioneered the slipforms, and they did that because they didn't have any labor after World War II. All the men were killed, and so they needed to mechanize construction. So we imported it and applied it. Our whole driving force was: Try to minimize risk by mechanizing processes as much as possible.

Now, George did that in Hawaii with his slipforms and his fly-forms. You could assemble this big machine on the ground, this big slipform. You've seen some pictures of some of these slipforms and they're unbelievable, they're huge. But you could supervise the workforce. It was down on the ground. These slipform edges were four-to-five feet high. People were working on the dirt. They weren't working 300 feet in the air, very efficient, get their tools to them and everything else. Created a machine, it may have taken you thirty guys to build that machine, it may take you five guys to run it, and so that's what we did because that becomes predictable. It's easier to manage them on the ground. You concentrate your exposure in one place. You reduce your risk. You

don't have the worry of a guy 300 feet in the air in the middle of the winter. What's his productivity going to be? Is it a cold day, sunny day? How do you predict that?

But if you build a machine and invest that capital, that capital stays the same, all the way up your building, and you've now cut your labor risk substantially. So this [enhanced and predictable productivity] is what was driving our innovation was to mechanize a construction process. That's why we precast. That's why we did precast beds, everything towards mechanizing the construction progress rather than building each and every little piece in place as a onetime operation under god knows what circumstances. So I'm predicting that [unknowable labor productivity] two years ahead of the fact because that's when you had to price it.

So that [substituting capital to enhance labor productivity and make it more predictable] is what drove our innovation. Now, we pirated ideas from all over the place. We applied slipforming to buildings in fashions that nobody ever had done. Lots of people slipform. Not a lot, but a number of people. In Europe, a lot of people slipform, but they didn't necessarily do some of the things like—some of George's slipforms were unbelievable, they were so big. The idea of slipforming building cores, that really hadn't been applied in the United States very much by anybody, and we did it fairly routinely for office buildings.

But, again, it was just this whole driving force was mechanization, and controlling risk is what we were always trying to do, and speed up process, construction speed, which was always important. We produced buildings very, very rapidly compared to the rest of the industry, and so we always had speed as part of our innovative motivation. Risk and speed, I think, were the two motivators.

Something like the hybrid frame was entirely different. The reason why I went off on that was we could not build [high-rise] concrete office buildings [in high seismic zones] now. The hybrid frame hasn't been applied—I guess it has been applied to an office building now, but anyway, its original application up in San Francisco was to housing, which that was a forced marriage because that was never—I didn't conceive of it in that type of usage.

But anyway, our office buildings, we were limited to about fifteen stories in high seismic areas, and then we had to go steel buildings because of the codes. I was bothered by two things. One, I wanted to be able to extend our techniques to taller buildings, because I thought we'd blow steel out of the water. Number two, I was struck as to how naïve the financial industry was on what was securing their loans. The life insurance companies and the banks and whatever making the loans on these buildings, the engineer told them, oh, yes, they're seismically designed. In the lender's mind, the building—big earthquake—but it's going to be there and it's going to be fine. In the engineer's mind, the building's not going to collapse but it may have zero economic value after the event, and, boy, that's what happened.

What was our most recent big earthquake in the early—

Adamson: Northridge.

Stephan: Yes, Northridge, where all the steel buildings failed. Amazed everybody, and suddenly lenders discovered [they had flawed collateral], and this was shortly after we started into the hybrid frame—but that was my two motivations. I wanted to build taller

than fifteen story—a hundred and sixty feet was the magic number—buildings out of precast concrete, and I didn't want the building to destroy itself saving itself, and those were the two things.

I, fortunately, was put on a committee to look at—NSF (National Science Foundation) was sponsoring a joint program with Japan to look at precast structures, commercial buildings, and NIST (National Institute of Standards and Technology] had done some work on using precast [concrete] moment frames. I was exposed to that [NIST work] at one of those meetings and immediately the light went off. Shortly thereafter I went to Japan with Neil Hawkins, who was up at the University of Washington at that time. He was heading up the structural department up there. I didn't know how you did research, and we were over there on a team that NSF sponsored to look at how Japan was doing its research.

So Neil and I sat around several evenings, and basic question to Neil was, number one, here's what I think I'd like to do, does that make sense structurally? Number two, how in the world can I go about doing this [that is, researching my concepts]? So he was really good. Neil gave me every bit of encouragement he could, and so we entered into this deal with NIST to develop this frame. The whole idea was the frame functions in an earthquake without destroying itself. It does not destroy itself dissipating the energy, which is happening with all the buildings.

So when the next great earthquake comes, I think it will probably make that [the hybrid frame] a very popular way to build buildings, because I'm convinced it's going to function beautifully. Since you're an architect by training, we took six degrees rotations on the joints, six degrees. Can you imagine that in a high-rise building? That's a huge

rotation, opening up your joints. They come together like that. Opening them up like that, and we rocked them, rocked them. We dissipated the energy by putting mild steel rebar top and bottom that acted like a shock absorber. Then plastic deformation [of the mild steel], heated, compressed back again, heated, dissipated the energy beautiful, so you dampened it. You didn't sit there and just rock it, like a car without shock absorbers. It would dampen it out. The structural part of it was the high-strength strand, and we relied—to resist sheer, we relied on sheer friction, so we kept them [the beam ends] forced against this [face of the column]. So in the earthquake, we never worked the essential part of the integrity of that joint, in the earthquake, because the strand's in the middle, and if you chamfer your edges right at the top and bottom, your beam rotates and it doesn't beat itself up and end up with a building that performs absolutely beautifully, I'm convinced.[38]

It kind of revolutionized how everybody looked at it. Steel industry started changing what they were doing. Northridge drove their change, but they immediately started appropriating the ideas in about '94, something like that, because they saw the success of the testing on the frame.[39]

Adamson: This framing system is not proprietary technology, so it's not—

Stephan: No, no. I insisted it not be. You know, Charlie was great. We want to patent everything, so our portable prestress beam bed—that came out of our very first project I worked on, Bristol Town and Country. Tom Verti was on that. He was the project engineer. I was so enamored with what the company had done, because we came off

these other jobs that—Kaweah Delta District Hospital we had done very innovative things on it and down in Texas we'd done very innovative things in those buildings, and so I was really kind of into this great new ways to build things, aren't we smart?

And then I saw what Pankow was doing. I thought, "This is some of the most logical stuff I've ever seen. This is fabulous. I want to do this [a precast concrete frame] on our little medical office building [at Bristol Town & Country]." Well, there was no way in the world to amortize the cost of an in-ground prestressing bed on that size of building, and so we couldn't do it [that is, utilize a precast concrete frame] on that building. But what does that immediately tell you? Well, if we could amortize it over three of those smaller buildings, then we could build the building that way [that is, with a precast concrete frame] and we'd have a better project for the owner and something that could be very profitable for us.

So that's where the genesis came from, and then Ralph Tice is the one that worked up the bed. Well, okay, we're going to patent it. I think we patented the airshafts and slipform cores, of all things. I don't know. We patented some really stupid stuff, but with no intention of ever enforcing them. It was more of an ego trip than anything else.

When we came to this, I told Charlie, "We're not going to patent this," and he agreed because it was my baby. Because if we had patented it, we would never have gotten it adopted. You know in the construction industry, proprietary systems are viewed with a great deal of suspicion. Somehow you're stealing, you're not competing fairly. This a mano-a-mano program. Everybody's got to start from the same place and the best man wins. Well, that's silliness. So if we'd have patented it, you'd have gotten

resistance from the code guys, you'd have gotten resistance from the owner, you'd have gotten resistance across the board.

I said, "Hey, number one, what we're doing is so technically demanding, by the time people catch onto it, shame on us if we're not onto the next thing." I certainly hope the company's on to the next thing. I have no idea if they are or not, but they better be. Over the years, this had always been the case. We'd come up with these ideas and nothing secret about it. In construction, you don't have trade secrets, because your carpenter works for this guy today and that guy tomorrow. So there's no secrets. But there is capabilities and there is willing[ness] to make the effort to learn how to do it, and most companies don't have that. So I knew that it would be years before other people started copying us, and by that time, shame on us if we're not onto the next thing.

So I just insisted we not patent it, that it be open, and whoever wants to can use it, and I've been right. Nobody else is using it, and it required a great deal of precision precasting to do it, and there's probably not very many companies that could perform precasting to those levels [that is, at the precision required] to make it work.[40]

Adamson: This isn't a question on the list, but your comments spark it. So what other activities have you done to promote concrete as a building material?

Stephan: Well, I was president of ACI. [laughs] But, really, we didn't promote it. We used it because that was a good way for us to maximize our profits on the job because if we could produce a building for the owner's needs and make more money at it, why not do it? So concrete buildings, we were very good at it, and particularly precast concrete

buildings we were very good at, not so good at cast-in-place building at all. But precast concrete buildings we were good at, so we could maximize our profits. So that's the kind of building we would want to build. Another contractor, god, would never propose to an owner to build it that way because it would cost him a ton of money more because he wasn't that good at it.

So we didn't promote. We built out of steel. Almost all of our shopping centers are out of steel. Our very technical overbuilds were all out of steel. In fact, we changed one shopping center from concrete to steel. That was Donahue's center at Montebello. It was originally designed in concrete, and we switched over to lightweight steel and gave them a much better number on it. So we didn't push concrete, we just liked it when it was the appropriate use.

You know, I've thought of something. It's an interesting aside if you don't mind storytelling.

Adamson: Please. That would be great.

Stephan: Precast for exteriors of the buildings—and this gives you, I think, some insight into how the guys in the company thought and how determined they were, and hopefully still are. There was basically three ways to mold these things [precast concrete panels].

Ralph Tice loved a concrete mold, very rigid, heavy, strong, durable. Alan Murk liked a steel mold because he could go buy it from somebody. He didn't have to make it, and he would just as soon buy something from somebody else rather than having to make it.

And then Tony Giron decided on a particular project that he wanted to build the molds out of fiberglass. The product out had a lot of detailing on it, and so to strip it, if your mold was a little flexible, it would enhance the stripping operation. A big concrete master [mold] would be too rigid. A steel one—it would be difficult to get that kind of detailing in steel. So he thought what about a fiberglass mold?

He goes down to this—this is when Orange County had all the boat manufacturers still [located] in Costa Mesa. He goes down to their plants and learns how to lay up and shoot fiberglass, on his own, because he wants to try it. Now this is the kind of attitude in the company that produces these kinds of things. So he does, and Giron falls in love with fiberglass forms, and he taught the carpenters how to shoot and lay down fiberglass, use the chop guns, whole nine yards. He taught himself by going down to the shipyards and getting them to show him what to do, what do I need to buy, what kind of resins do I need, and brought that into the construction industry, which was a remarkable thing for somebody to do.

Adamson: That's a great story. Let me stop a second.

[Begin Track four]

Adamson: Go ahead.

Stephan: When we first started into this, we were getting past the salvage jobs and into actually selling design/build from day one, and, of course, you get the response, "Oh,

well, sure, parking structure, you can do that design/build. What is there to it? But you want to do my office building? Oh, that's much too complicated."

So, what do you do? You go out and make yourself smart in office buildings. You go out and find. How many contractors do this now (the people that are doing project management that are building off of fixed set of plans)? Zero. But if you're helping to generate those plans, you've got to be as smart as everybody there at the table and perhaps smarter. You've got to have the big picture, because they're going to be pretty knowledgeable in their specific areas, but they don't necessarily have the big picture.

So you go and find out, what are these steps? How do you organize your law storage libraries? What kind of floorings do you get in libraries? What kind of capacities do you need to view? What kind of air-conditioning system? How does a conference room differ from an office? You go out and you spend the time and you get smart. So you show up at the next meeting and you say, "Okay, we want to do this design/build, and here's what you need. Here's the considerations. Owner, you know you need to decide whether you want this or that."

All of a sudden, he realizes that you know as much or more about what he's trying to do than he does, and generally, quite frankly, the architect that sits there, you know as much or more than he does about what he's trying to accomplish. So, all right, office buildings, shell and core, we understand that. That's not that complicated. That can be design/build.

But you want to do my hotel? I can remember Verti and I went on a mission to get smart in hotels, and so we went and visited hotels, walked into the back of the house

spaces unannounced, talked to the chef, got familiar with housekeeping, knew how many rooms a maid did, so you could work out how many rooms per floor was optimum, given how you were going to do your maid shifts. We got smart in hotels. Took us a period of time, but that's what we needed, and sure enough, voila, you can do hotels.

Arcadia Methodist Hospital's coming up. Of course you can do parking structures, office buildings, and hotels. Those are pretty straightforward. But a hospital, that's much too complicated. Get smart in hospitals, find out about the services, what are the doctor rotations, what are the nurses stations, how do you get flex between maternity because you might have thirty babies today and twelve tomorrow? Go get smart. Show up at the meeting and say, "Well, you know, here's some of the areas where we need to address, some of the problems that we need to cure in how we're laying this building out." All of sudden, hospitals are now able to be done design/build.

It's amazing, and to our industry's discredit, I bet you couldn't count on one hand the number of contractors in the United States that ever make that kind of effort, but we did at Pankow.

Adamson: This is something you were saying you brought from your Navy experience?

Stephan: No, no. No, no, no, no, no, no, no, no. The getting smart in buildings is something we needed to do to sell it [design/build]. What I brought from the Navy experience was how to work with design firms to understand how they made and lost money so that you didn't fly in the face of their operations when you were coordinating

putting these plans together. Some of the guys when they first would start in, they'd say, "Well, try this, and then try that, and then try that."

Well, now all of a sudden, that's costing an architect a lot of money, because he pays his people on an hourly and does his billing on the hourly, and we've got him under a lump sum [contract]. So this now becomes a financial problem to him. So what you've got to do, you don't do that. You don't try A, B and C. What you do is do your homework, so you try A and you know that there's a 99-percent chance that A works, and so you have to do your work ahead rather that being lazy and let them do it because it's going to cost them money and you're going to get resistance. So that's what the insight was that was helpful to me, because I had run a design division.

Adamson: What were your years in the Navy? This was before you went [to university]?

Stephan: '61 to '66, five years, and I was in the civil engineering corps, and first duty was Lakehurst, New Jersey, and then I went to Naples, Italy, and that's where I ran a design and engineering division. Because we were overseas and we did everything leasehold, we had a very independent operation. I didn't have to go back to Washington on anything.

But it was good experience for me, very good experience.

Adamson: Well, great. Thank you very much.

Stephan: Okay. Well, enjoyed talking with you.

[End of interview]

Endnotes

[1] Stephan puts it another way: "Dick Brewer, Winmar's Development Vice President, prodded the company to expand its off-site management talent."

[2] Stephan adds: "Flying forms were a new and innovative way to efficiently form flat plate slabs."

[3] "Charles Pankow Builders Ltd.: Celebrating 40 Years of Building Excellence," *Los Angeles Business Journal*, 29 September 2003, S7.

[4] Stephan adds: "The business practice applied to all projects, even captive ones on the mainland. I am not aware of Hawaii practices at this stage of company development."

[5] Chris Turner worked as engineer, project engineer, and project sponsor. He left Pankow in 2002 to form his own company. Norm Husk was an engineer, superintendent, and operations manager. He is no longer with the firm.

[6] Stephan adds: "Charlie, George, and Russ, as individuals, developed some projects that the company built."

[7] Charlie Pankow's father worked for Chicago-based Ralph Sollitt & Sons Construction. Ralph Shannon Sollitt, one of the sons, established branch office in South Bend, Indiana around 1920. The branch business operation incorporated in Indiana as Sollitt Construction in April 1935. It is no longer in business. The Chicago-based company, founded in 1838, continues doing business to this day as George Sollitt Construction. George was another of the sons of Ralph Sollitt (Charles Roll, *Indiana: One Hundred and Fifty Years of American Development*, vol. 3 [Chicago, 1931]; Sollitt Construction Co. Web site, URL: http://www.sollitt.com).

[8] Stephan adds: "We grew the company and its bonding capacity through retained earnings rather than external capital, equity or debt."

[9] According to the company's Technical Report for the project, Pankow subcontracted the concrete foundation work to Bouley. Pankow supervised construction of the 406,900-square-foot, enclosed shopping mall under a construction management agreement. Pankow subcontracted all of the work. All subcontracts were direct agreements between owner and subcontractor. Construction began in July 1974. The mall opened for business on 25 March 1976.

[10] Dean E. Stephan, "Professional Responsibility—Constructor's Role," *Journal of Professional Issues in Engineering* 113 (October 1987): 311–6.

[11] Christopher Olson, "Design/Builders Rapidly Expand Their Market," *Building Design & Construction* 25 (June 1984): 72–5.

[12] Stephan clarifies: There was "a lot of repetitive hiring of the same firms for various project types because we worked better with some firms than others. We did not do A&E in-house."

[13] Stephan summarizes: "We performed project management and architectural and structural concrete work with our own forces and subcontracted for the execution of other areas of the work."

[14] Stephan notes: "My answers apply to mainland operations. I do not know how George Hutton developed and marketed his work in Hawaii."

[15] Stephan notes: "Brochures then equaled today's Web site as an accepted way to communicate information on a company."

[16] Stephan notes: "Our project name was 411 Wisconsin Ave."

[17] Chicago-based Harry Weese & Associates was the architect of record on this project.

[18] Stephan clarifies: "We produced Exhibit A, the schematics plus outline specs."

[19] Stephan explains: "We entered into design and construction contracts to design/build the building described by Exhibit A. The working drawings and specifications were produced during the course of construction and incorporated into the construction contract as Exhibit B."

[20] Stephan adds: "We produced conceptual designs and Exhibit A work without cost to the owner. This extraordinary service creates value for the owner at a critical project decision stage. It also required that the company only engage with reputable owners on sound projects with realistic economics so the company's B & P [bids and proposals] overhead [expense] remained competitive."

[21] Stephan elaborates: "We brought up the permanent building exterior with us as we built the vertical structural frame."

[22] "MWD New Los Angeles Headquarters Dedicated." *California Construction* (January 1999): 26.

[23] Stephan clarifies: "The Japanese had nothing to contribute to our self-performed work."

[24] The three types include (1) Joint contracting, (2) developer and builder, and (3) investor and builder.

[25] Jackie Poole, "Contractors Chase Shrinking Business," *Pacific Business News,* 13 March 1995, 28.

[26] Stephan clarifies: "The TI group started as a means to provide revenue in San Francisco to smooth over rough times."

[27] Stephan elaborates: "I don't know how TI ultimately integrated into the company and impacted marketing and relationships with owners and subcontractors."

[28] Stephan explains: The sheets were "a current year and cumulative tabulation of volume and profit by the three offices (Altadena, San Francisco, and Hawaii)."

[29] Stephan elaborates: "The original incorporated company was liquidated and the net proceeds distributed to the shareholders when the company reformed as a limited partnership."

[30] Stephan clarifies that he should have said the late, not early, 1990s. See also the revised reference to the 1990s two paragraphs down (in the text).

[31] Stephan provides background: "The company did Tenant Improvement work from inception on shell and core projects. It was treated as a service to our clients so tenant occupancy of our projects could be expedited to enhance the owner's cash flow. It also allowed us to control the execution of tenant work during our shell and core work so we could avoid conflicts. The amount of TI completed over the years was sizable, but not treated as a profit center and not sought independently of the shell and core work."

[32] "Charles Pankow Builders Ltd.: Celebrating 40 Years of Building Excellence."

[33] Stephan adds: "We learned not to be reactive to designs. We learned to be proactive by establishing parameters."

[34] Olson, "Design/Builders Rapidly Expand Their Market."

[35] "Design/Build Competition Sparks Controversy," *Building Design & Construction* 35 (November 1994): 9–10.

[36] Stephan adds background: "Non-appropriated funds did not have the same procurement restrictions attached to them as congressionally appropriated funds did. Non-appropriated funds were generated by the profits from the clubs and Exchanges."

[37] "Change: The Building Team Is Getting Together for a Change," *Building Design & Construction* 14 (December 1973): 34.

[38] Stephan adds background: "The strand's response is within its elastic range so it does not degrade during an earthquake. Because it maintains its original braces, the strand replumbs the structure after the rotations. [There is] no P-delta effect."

[39] See also, Dean E. Stephan, "Lessons of Northridge Only Now Being Assessed, Says Master Builder," *Daily Pacific Builder*, 21 September 1995.

[40] On the precast hybrid moment resistant frame, see also, Martha Blastow, "Momentary Connection." *Concrete Products* (September 2000); Larry Flynn, "Framing the Moment," *Building Design & Construction* 42 (August 2001): 32–4; David B. Rosenbaum, "Record-Height Concrete Building Uses Quake-Resistant Precast," *ENR*, 14 June 1999; Laurie A. Shuster, "Keeping It Together," *Civil Engineering* 70 (March 2000): 44–7.