# Miscellany

## Fast Growth Not For Everyone: Ask Skip Kelley



Four years ago, Skip Kelley was featured in INC. as an up-and-coming entrepreneur working out of Newbury, a town north of Boston, Massachusetts. He had just converted his business — Kustom House Co. — into a franchise of Mr. Build International. Mr. Build offered management expertise and marketing clout, and in Kelley's first year with Mr. Build, his sales rose 50 percent. But in 1985, Kelley liquidated his business. He had lost his marriage, his house, and his company car in the process. What went wrong?

When Kelley dissolved his business, Mr. Build was operating on projected earnings of \$1.2 million. This figure was based on annualizing the dollar volume that Kelley was getting in sales at the time — but it bore little resemblance to the amount Kelley was earning as profit. As Kelley discovered, "Success doesn't come from big dollar volume, but from profits." Growth ate away at the earn-

ings, and Kelley was paying a fortune in salaries and overhead

Kelley learned that he was not really prepared for the growth that the Mr. Build franchise brought him. For one thing, the labor shortage began to impact on Kelley seriously. Kelley, who subcontracted all labor, now had plenty of work, and few workers to do it. He tried solving that problem by raising his prices, hoping that he could slow business down. The result was even more work, because, according to Kelley, people thought because he "was expensive [he] must be really good." He tried limiting his clientele even more by only taking very high-end work. What happened was that his customers, though fewer, were more demanding.

Meanwhile the company had grown top heavy. Kelley now had a full-time staff of seven people, all management. (Remember, he subbed out all field work.) Clients were getting less personal attention, and the personal touch was lost in-house too. Pilferage of tools and supplies became a real problem. Employees lacked loyalty. Kelley went through 17 employees in two years. And Kelley lost touch with what his employees were doing. Later, he was to discover a second set of books one of his managers was keeping. "He wasn't stealing money, but he wasn't spending it the way I wanted it to be spent. I lost some of my best subs because he lied to them, saying he couldn't

pay them when they needed to be paid. If I'd known about it, the money would have been there for them."

At first Kelley tried to scale the business down, perhaps selling the business at a profit. He laid off most of his employees, and cut down on his overhead. But it was out of control. It was at this point that Kelley discovered the second set of books. He decided to chuck the whole thing. Now he runs a one-man home inspection business (Home Inspections by Skip Kelley, located in Byfield, Massachusetts) which is doing "very well." In fact, his new business has quadrupled in size during its short two years. (He says he's trying to "watch it," and not let rapid growth get the best of

What does Kelley have to say to other remodelers who want to get big: "Start by associating with the people you think you want to be like and who own businesses like the one you think you want to have. Take them to lunch. Try to decide if you'd be happy in that position. Then join the associations — you'll get a chance to hear all the points of view, get a look at the problems, and even some of the solutions."

Above all, Kelley suggests that if you want to grow you have to be prepared to analyze your situation regularly. And take vacations. "I took only two vacations in 23 years," he says, "and that's ridiculous."



A crew lifts a wood and foam foundation panel into place. The system uses treated 2x6s with sheathing on the interior - where it will stay warm, dry, and rot-free, says Lstiburek.



Three to four days of crane time are needed to assemble the shell. Notice exterior strapping is used to maintain an air space between wood siding and foam sheathing.

## No-Nonsense Housing

What kind of house has no sheathing on the exterior, no masonry in the foundation, no drywall, and no ductwork? The answer is the culmination of two years of hard work and experimentation by building innovator, Joe Lstiburek (pronounced stee-brek).

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"was to make the construction
process more efficient and make
costs predictable. Scheduling of
the trades was the real problem.
So this system uses just one
trade to assemble the shell and
foundation."

The structure is panelized at the factory and assembled on site with a crane in three to four days. Panels are made of 2x6 framing with the waferboard on the interior. "It does the same thing structurally on the interior," says Lstiburek, "and I don't have to deal with the Sheetrock subs."

"The next ones to get rid of were the sheet-metal men," said Lstiburek. "So I used a plywood plenum that runs down the center beam of the house." The plenum is pressurized at high pressure with small registers, says the builder, so that the last register gets the same airflow as the first.

The foundation subs were also

kept off the site by using a modified wood foundation set on pre-cast concrete pads.

Wall and roof panels use 2½ inches of polystyrene foam on the exterior and the cores are blown with fiberglass. The panels, up to 32-feet long, are sealed together with neoprene gaskets and elastomeric caulking. Roofing and sheathing are strapped away from the foam to leave an airspace, designed to protect the siding and roofing from moisture damage. On the inside, a heavy fiberglass-reinforced wall fabric covers the chipboard to create one-step finished walls and ceilings.

The heating and ventilation systems are novel, as well. A direct-vent water heater is the heat source — tied to an Apollo Hydroheat forced-air distribution system. An exhaust fan provides whole-house exhaust pick-ups (made by the French company, Aereco). Makeup air is fed to the return side of the heating system. The cost of the manufactured

shell — with HVAC — is competitive with its stick-built equivalent, says the builder. For more information, contact Building Engineering Corp., 157 Richard Clark Dr., Downsview, Ontario, Canada M3M 1V6. ■

### Insure Yourself Against Asbestos

Asbestos liability is a risk for anyone bidding on retrofit or remodeling projects, but particularly for mechanical contractors. The ideal solution for the subcontractor is to pass that risk back to the general contractor and in turn, back to the owner, according to Twin Cities Piping Industry Association. The way to do that is with an asbestosexclusion contract rider. The group, with the help of an attorney, has come up with the following suggested contract language for their members. Of course, you should first check out any contract alterations with your legal adviser.

"This proposal is conditioned on the inclusion of the following contract language: "1. The work shall not include

"1. The work shall not include the detection, abatement, encapsulation or removal of asbestos or products or materials or equipment containing asbestos.

"2. This clause shall govern over any conflicting or inconsistent clause of the General Contract, general conditions of the contract, special conditions, technical conditions, plans, or specifications.

"3. In the event that the con-

"3. In the event that the contractor encounters any asbestos product or material in the course of performing its work, the contractor shall have the right to discontinue its work and remove its employees from the project, or that portion of the project wherein such product or material was encountered, until such product or materials, and any hazards connected therewith are abated, encapsulated or removed, and/or it is determined that no hazard exists; further, contractor shall receive an extension of time to complete its

work and compensation for delays encountered and compensation for any change in the sequence or method of its work occasioned as a consequence of said encounter."

For those of you who do run into asbestos on a job - and need general information, you can contact the EPA's regional 'asbestos coordinator," who will field questions and who should have a list of testing agencies and abatement contractors. For the six New England states, the coordinator is Alison Robinson, Regional Asbestos Coordinator, U.S. E.P.A. Region I, IFK Building, Boston, MA 02203; 617/565-3744. For New York and New Jersey, write or call Arnold Freiberger, Regional Asbestos Coordinator, U.S. E.P.A. Region II, Woodbridge Ave., Bldg. 5, Edison, NJ 08837; 201/321-6671. ■

## OSHA Says:

#### Contractors Must Warn About Chemical Hazards

Starting May 23, all building contractors will be required by law to warn their employees about the hazards of chemicals with which they work. In addition, formal training will be needed for employees who routinely use chemicals in their jobs.

The requirements — which have been in effect for years in manufacturing plants — are being extended to job sites under a new rule adopted by the Occupational Safety and Health Administration (OSHA). Under "Hazard Communication" (Rule# 1910.1200) these requirements will be applied to virtually all contractors, including those who hire only temporary or part-time assistants.

Warnings and training will be required for use of almost every substance that has a known hazard, including mastics, solvents, lubricants, butane and propane, solders, fluxes, muriatic acid, and cleaning compounds.

There are a few exceptions. Among those outlined in OSHA's official explanation of the ruling in the Federal Register:

Wood is not subject to the

requirements, because "First, the presence and identity of wood and wood products in the workplace is 'unmistakable,' and second, their hazards (i.e. flammability or combustibility) are well-known to workers." However, chemical additives to wood products may come under the requirements; "wood dust is to be considered a hazardous chemical and therefore subject to the requirements of the

 If you have an office copying machine, and your employees occasionally use it, no formal training will be required. However, if an employee uses the machine frequently, and has the responsibility of handling toner or other chemicals, "that employee would be entitled to information under the rule."

rule."

 Common consumer products are covered only if they are used more extensively by workers than by most consumers.
 For example, household cleanser is not covered if it's used occasionally to clean up after a bathroom remodeling job, but it may be covered if it is used routinely to clean equipment.  $% \label{eq:clean} % A = \{ (x,y) \in \mathbb{R}^{n} \mid (x,y) \in \mathbb{R}^{n} \mid (x,y) \in \mathbb{R}^{n} \text{ for } (x,y) \in \mathbb{R}^{n}$ 

 Only workers exposed to a chemical must be warned about it. "For example, if the electricians are not working near, or at the same time as, the paving contractor, then no interchange is required. But if a painting contractor's workers are using flammable solvents in an area where another subcontractor is welding pipes, this information exchange is vital."

Under the rule, each contractor will be required to prepare a written "hazard communication safety program." That document must describe how the contractor will make safety information available to employees, list hazardous chemicals used in the workplace, and explain methods for informing employees about hazards they may encounter in non-routine tasks.

In general, the written program must be kept at the job site. However, if employees routinely switch from one job site to another, it may be kept at a central office.

The specific warnings are provided by chemical manufacturers, who already must include "material safety data sheets" with their shipments. Beginning in May, contractors will be required to keep those sheets, and make them readily available to employees.

The rule says contractors must formally train employees using hazardous chemicals "at the time of their initial assignment" and whenever a new hazard is introduced.

In addition, information on hazards must be made available to the employees of other contractors working at a site. If the job is being done at a commercial establishment, the employees working there must be informed as well.

A spokesman for the New England Regional OSHA office, Ron Ratney, told New England Builder that the agency will allow some flexibility in how contractors implement portions of the rule.

For example, Ratney says, if you have a part-time or temporary employee who uses a chemical

once or twice, it may be sufficient to inform him or her about specific hazards. "But if a longterm employee will make regular use of a chemical, you will need a full-fledged training program." This interpretation may alleviate some concern on the part of the contractors who often have to deal with rapid turnover where in-depth training of shortterm employees could be costly. OSHA estimates the rule will cost an average of \$169 per contracting firm and \$32 per employee per year.

The point of all this is to decrease illness, and OSHA estimates that the expanded ruling will eliminate 750,000 illnesses over the next forty years.

Contractors desiring more information about the new rule are urged to contact a regional OSHA office, or the national office at the Office of Information and Consumer Affairs, Occupational Safety and Health Administration, 200 Constitution Avenue, N.W., Room N3637, Washington, DC 20210; 202/523-8151. ■

— Steve Carlson

## FROM WHAT WE GATHER

"No surprises, just do the job and do it right," is what developers want most from contractors, according to a study conducted by Austin-based Parkinson & Associates. Price was fourth on the list.

Greenhouses and sunspaces are added on to about 100,000 homes annually, according to the Greenhouses for Living Center in New York. Builders should recognize, however, that greenhouses are designed for plants and sunspaces are designed for people. One space can't suit both well.

Carpets cover eight out of ten living rooms nationwide. But in the Northeast, only 58 percent choose carpets, according to a survey reported in the Real Estate Newsletter.

Euro-style kitchen cabinets are too trendy and may detract from resale value, according to the Hardwood Manufacturers Association, which conducted a series of builders' discussion groups. Other findings: Traditional hardwood cabinets are seen as more forgiving in installation and less expensive to install than frameless cabinets.

High levels of lead, copper, and zinc may remain in the drinking water of new homes for several months, and then subside, according to a report in Contractor. The source is corrosion in new copper, brass, and galvanized-steel plumbing.

Poor lighting is the number one environmental irritant facing U.S. office workers, according to two-thirds of the interior designers polled, according to a report in Building Renovation.

Total construction payrolls increased 41 percent nationwide from 1982 to 1987. New England led the country with a 98 percent increase, followed by the Mid-Atlantic region with an 80 percent rise. Worst on the list were the Rocky Mountains (-12 percent and Southwest (-7 percent). Source: U.S. Dept. of Commerce.

Actual energy savings from conservation retrofits averaged two-thirds of what had been predicted by earlier energy audits, according to a recent study in Wisconsin by Oak Ridge National Laboratory. Most furnace replacements performed as predicted, but wall insulation always performed worse than expected.

Urethane and isocyanurate foam roof insulation has been derated to R-5.56 per inch by the Manville Corp. in response to concerns and questions about "thermal drift." Meanwhile, the Preformed Plastic Thermal Insulation Committee of the Canadian General Standards board has recommended an aged value of R-5.8 per inch.

A \$2.50 raise goes to union carpenters in Mass. over the next two years. Carpenters currently make \$24.80 per hour including \$6.02 worth of benefits.

## Chlordane Outlawed... What About Termites?

Chlordane has been used to control termites since 1948. Its effectiveness and longevity made it a popular pesticide Unfortunately, these same qualities made it a threat to humans. Evidence that the chemical could cause cancer coupled with the fact that it broke down very slowly in the environment moved the U.S. Environmental Protection Agency (EPA) to work to eliminate its use. Late last summer, the agency announced that Velsicol Chemical Corp., sole manufacturer of the chlordane formula, and major manufacturer of chlordane-based pesticides, had agreed to stop production. Currently, EPA restricts use of the Velsicol pesticides to certain conditions (pre-construction, and not applied under pressure). By April 15, 1988, the use of Velsicol pesticides will be totally outlawed.

There are other chlordanebased pesticides on the market, (available under different labels) but since Velsicol is the only supplier of the chlordane formula, this action will effectively close them down as well. What can builders do to prevent termite damage to their construction?

According to Mike McDavit (EPA), the alternatives fall

into two major categories: Organo-phosphates and Synthetic pyrethroids. Organophosphates are organic compounds with phosphate groups, and include Dursban and Pryfon (Dursban is the only pesticide sold over the counter all of the rest are available only to pest control professionals). Synthetic pyrethroids are synthetic imitations of naturally occurring pesticides like those produced by chrysanthemums, and include products with names like Torpedo, Dragnet, Demon-TC and Tribute. (The last two are not actually out on the market yet, but will be

The cost of application will be going up with the use of the new products. Treatment of an entire house with chlordane would cost \$100 or less. Treatment of the same house with the new products can run anywhere from \$150 to \$260. But the rising cost is only symptomatic of the real concern, according to George Rambo of the National Pest Control Association: longevity. "Chlordane was effective, even at low levels," states Rambo. "Basically it covered any mistakes. We're not sure how long the new alternatives will be good for. And the operator will have to make sure the coverage is uniform and continuous — something that is hard to guarantee.'

Operators will have to "follow the label directions to the letter," says Rambo, "if the product is going to be effective at all." The Association will be spending most of its efforts this coming year educating its members as to the use of the new products.

Rambo believes that the pyrethroids may break down faster than the organo-phosphates (except in the Southwest, where ph degradation may affect the latter). But the trade rep says it's too early to tell which product will serve best. It is unlikely that any of them will be as long-lasting as chlordane. (According to the EPA, chlordane has been found in the soil of treated areas as much as 30 years or more after treatment. It may be necessary to re-treat houses after ten years, perhaps even after five, worries Rambo.

But Boston-based exterminator Brian Beane isn't worried. He has never used chlordane in his business, and swears by Dursban. "A one-percent solution of Dursban will do the job, has a residual life in the soil for six years, and we find that's plenty enough. And it's a lot better as far as air quality is concerned."

#### Average Annual Pay In 1986

	Construction Industry	All Private Employees	,	Construction Industry	All Private Employees
United States	\$22,190	\$19,746	Missouri	23,358	18,838
Alabama	17,450	17,228	Montana	20,512	15,303
Alaska	40,549	26,838	Nebraska	18,842	15,781
Arizona	20,598	18,351	Nevada	24,294	18,127
Arkansas	17,004	15,863	New Hampshire	21,371	18,199
California	25,793	21,632	New Jersey	26,977	22,171
Colorado	22,173	19,969	New Mexico	16,736	16,551
Connecticut	26,353	22,523	New York	26,834	23,111
Delaware	19,495	19,717	North Carolina	16,907	16,792
District of Columbia	23,229	24,300	North Dakota	18,808	:330
Florida	18,394	17,299	Ohio	22,323	19,860
Georgia	20,100	18,723	Oklahoma	19,102	18,342
Hawaii	28,361	16,907	Oregon	21,065	17,857
Idaho	22,189	16,469	Pennsylvania	22,830	19,166
Illinois	28,064	21,420	Rhode Island	21,686	17,026
Indiana	21,992	19,059	South Carolina	17,225	16,210
Iowa	9,198	16,359	South Dakota	16,573	13,965
Kansas	20,695	17,896	Tennessee	18,574	17,412
Kentucky	18,209	17,237	Texas	20,656	19,976
Louisiana	19,950	18,599	Utah	19,635	17,335
Maine	18,335	16,166	Vermont	17,927	16,679
Maryland	21,093	19,275	Virginia	19,221	18,326
Massachusetts	24,591	20,737	Washington	21,469	19,077
Michigan	25,000	22,869	West Virginia	19,994	18,578
Minnesota	25,033	19,280	Wisconsin	22,474	17,869
Mississippi	15,899	15,319	Wyoming	22,607	18,572

The average annual pay data shown above is calculated by taking the annual industry payroll in the state for employees covered by unemployment insurance, and dividing by the average monthly number of full-time and part-time employees. Included in the payroll data are bonuses, the cash value of any meals and lodging provided, and employer contributions to deferred compensation plans. As you can see, construction workers in Alaska, Hawaii, and Illinois had the three highest average annual pay scales. Lowest-paid were workers in Mississippi, New Mexico, North Carolina, and South Dakota.

SOURCE: Bureau of Labor Statistics, U.S. Department of Labor

#### Remodelers' Standards Published

The National Association of Home Builders (NAHB) has published the first reference manual of acceptable construction practices for remodelers

tion practices for remodelers. Quality Standards for the Professional Remodeling Industry offers 122 industry standards that remodelers can use to monitor the quality of work on their jobs. In each of the major construction categories, potential defects are described, performance standards are given, and a corrective measure is specified. The publishers hope to encourage a uniform and consistent level of performance in the remodeling industry. In addition, NAHB hopes that the remodeler can use the standards to resolve customers' complaints about quality of construction without resorting to third parties or lawsuits. The book costs \$10 to NAHB members, and \$13 to nonmembers. To order, contact the NAHB Bookstore, 15th and M Streets, N.W., Washington, D.C. 20005.

#### QUOTE of the MONTH

"If you are in the contracting business, my first question to you is: who is going to do the work?" asks Canadian housing analyst Earl Berger, noting that only 25 percent of the population will be under 25 in 1991, and they will comprise the best educated segment of society. "And this is the population that you think will become a painter or a plasterer!"

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