Engineering Pays Off at Work and at Home

By EILEEN FOLEY

THE LITTLE GIRL stood staring at the brunette bricklayer, then solemnly said, "My mommy says ladies don't do that.

"Honey," replied the brunette bricklayer, slapping on some more mortar, "she has the wrong idea of what constitutes a lady."

Speaking was a woman who's unbetrayed by jokes like, "She's no lady, she's an engineer.

She's Dorothy "Dotty" Hoffman by name, engineer by profession, lady by nature, and the first female to be invited to membership in the exclusive, 84-year-old Engineers' Club of Philadelphia.

By weekends she's a do-it-yourself patio bricklayer, indoor plumber and occasional electrician, plus the perennial cook.

"Yes, I can cook. If there's anything a chemical engineer learns it's to follow a recipe."

MRS. EARL Hoffman is an engineering research project leader at International Resistance Co., and a pioneer in the development of micro-miniature metal film resistors.

Hoffman has also achieved an important role in the continuing Air Force's Minuteman missile program.

For it her Philadelphia-based firm, where she has worked 11 years, has developed a new ultra high reliability fixed metal film resistor which must function faultlessly--only one failure is permitted in 250,000 units of hours of operation. (Resistors, Dotty explains, are small--electronic devices which regulate the flow of current to various parts of any electronic system.)

DISCOVERY, that day eight years ago, that her pet experiment had proven something, was far more significant. Hoffman--you'd think of lighting or proof of chemicals. Dotty had a pencil in her hand, plotting the data and her deductions.

During those days she worked in the research laboratory nine years before switching to process development, the dramatic, dark-haired engineer donned overall and constructed her own evaporative unit--putting in the pumps, valves, and wiring.

"My husband—he's a graduate engineer, too, but now has his own sales-by-mail business. Thanks as long as I'm capable of doing little plumbing and wiring at home, why discourage me," she said.

Most summer weekends found them clearing the woods ("we take turns sawing and lugging") on a lakeside lot in the Poconos, where they'd unfold their kayak-like German-made boat to sailing to take in a "boating break" from the trees. An avid swimmer, the Hoffman family often stayed over weekends at gardens.

ABOUT HER admission last month to the heretofore all-male Engineers' Club, she comments, "I thought it was about time someone broke the ice and jumped in, so I filled out an application."

In one corner of her lab is a kiln named the Longhour Ceramics Club which represents 24 scientific groups and thousands of local members, Mrs. Hoffman also heads the city's Society of Women Engineers, whose initial goal of equal opportunity has now been switched to recruiting women for their craft.

"Engineering is one of the best educations. It teaches you think logically," believes Dotty whose greatest compliment was paid last year when IRC hired not only another engineer but a female physicist.

They were a rarity when she entered Rensselaer Polytechnic Institute in Troy, N.Y., and emerged four years later with a degree in Chemical Engineering and Bachelor of Science.

FASHION is a passion in the life of the Hoffman family. Mrs. Hoffman has worn nothing but suits since she was a little girl.

CURRENTLY a technical consultant for microcircuits, she rarely wears either casuals or a white coat over her self-sewn dresses—"They're too darned hot. A non-smoker, she's adamant about the no-smoking signs in the laboratory, where ash-flicking would contaminate conductors by high vacuum technology to as little as one-hundred millionths of an inch strip.

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Dear Abby

Must 'Good Girls' Dye, Too?

By ABIGAIL VAN BUREN

have been seriously considering dyeing my hair a red shade of the beautiful color I see in the movies. I have light blonde hair now, and I think it would be a nice change. However, I am not sure if it is the right thing to do. I am a young woman and I want to make sure I am making the right decision.

I have read about different types of dyes and have heard that some can be harmful to your hair. I am not sure if the damage is temporary or permanent. I want to make sure that I am not going to ruin my hair by doing something like this.

I have also heard that some dyes can cause allergic reactions. I am not sure if I am allergic to any of the ingredients in the dye. I want to make sure that I am not going to have any negative reactions to the dye.

I am trying to decide if I should go ahead and dye my hair or if I should wait until I am older. I am not sure if it is the right thing to do at my age. I want to make sure that I am making the right decision.

I would really appreciate your advice on this matter. Thank you for your time.

Sincerely,

[Name]