Would You Like to Be... A Space Engineer?

**Mum's the Word--Her Job's a Secret**

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ONE-THIRD of U. S. engineers could be women, if young girls were given the necessary encouragement, said Betty Lou Bailey, an engineer who works on space missile projects.

Miss Bailey who holds a master's degree in engineering, has found life exciting since she graduated. In 1959 when she received a bachelor of science degree from the University of Illinois, she was offered a job usually given to men, at General Electric.

"The country is desperately short of engineers," she said. "And now, in a field wide-open to women there is only about one percent of our sex working in it."

Her figure that one-third of engineers could be women is based on her knowledge of the Russian proportions, and the fact that, in the USSR, women are given impetus to propel them into engineering.

MISS Bailey believes that the apprehension that existed about hiring women is disappearing fast. "In many cases an employer would more readily accept a woman engineer than he would a woman for many another responsible position. And the salary is as good as you can get--$7,800 to start and then, with experience, this figure could be doubled. If a woman makes the management side she can earn $18,000 or more a year."

At General Electric's division at King of Prussia where Miss Bailey is currently working, there are only two other women engineers.

She admitted that it is not as common for girls to have a talent for mathematics as for men and a special ability in math and science is essential. But she said that there are many young women who have this gift. "They are being diverted into other professions when they could find engineering a stimulating experience."

"I know of many girls with a degree who are going to night school to get a different one. This sounds as if they were never really properly counseled as youngsters. They have spent all that time, money and effort and arrived at the wrong place."

Encouragement and proper guidance should start for girls at high school level, she said.

MISS Bailey, who was born in Chicago, had the necessary penchant for math and science when she was at high school and played by ear her decision to go into engineering.

Recently, she worked for her master's degree at night school and received it in 1967. Her first job involved a training program, where she spent months testing equipment for missiles and jet planes. Then she worked two months on steam turbine building. All this was at GE's largest plant at Schenectady, N.Y.

After working at plants elsewhere where she returned to Schenectady and worked for 15 months on reactors for the nuclear navy. In 1961 she came to the missile and space division here.

Miss Bailey has found satisfaction here. "You create something, watch it pass through tests and then it goes out and gets used."

For five years her knowledge and skills were used on the plant's contributions to the weather satellite Nimbus.

... NOW her work is top secret--almost enough in itself to give a woman a sense of special status.

She is, however, working on satellites, and that is as much as she is permitted to say.

"But working on a space project do not necessarily mean working on satellites. A lot of people do not realize that the space program involves much equipment that doesn't fly. Satellites would be meaningless without all the wiz of ground-based equipment."

There is one snag to a woman working on a space project as an engineer. It often means traveling, and so, if she were married it would take a woman from her home and children.

"But I have known women engineers to bow out for a few years while they are raising homes and children and return later," she said.

"I do pretty well. I am single and my work comes first. If a project requires overtime, or if my team requires some extra work from me, I can stay on."

During her years of working as an engineer Miss Bailey has been able to indulge her wish to travel. The three weeks' vacation each year have helped her to get to Australia and New Zealand, to Alaska and to the West Coast.

"So I have been in 45 States," she said. Also, last year, she attended a conference in Great Britain.

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**Our Modern Pilgrims**

MANY of the Pilgrims landing on our shores today have as urgent reasons for coming as the early American Pilgrims did long ago. For many this will be their first Thanksgiving. In Sunday's Women Today section, they tell us what Americans have to be thankful for—even though we may feel we are living in troubled times.