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SCIENCE NEWS LETTER

®

THE WEEKLY SUMMARY OF CURRENT SCIENCE



Man-Made Quartz

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A SCIENCE SERVICE PUBLICATION

What General Electric people are saying . . .

G. C. HOUSTON

Mr. Houston is Manager—Manufacturing Training Services Section, Manufacturing Personnel Development Services Department.

“ . . . Leadership ability is not developed by attending lectures or by reading, even though such activities may be helpful in stimulating thinking and developing a higher degree of understanding. We believe, without qualification, that the only sound way to acquire and develop these abilities is through the process of learning by doing. Consequently, any well-conceived leadership development program is built around these principles . . .

Provide opportunities in the work situation to practice doing those things required of men in positions of leadership responsibility.

Associate with proved leaders.

Adequately evaluate performance and give sound guidance and counseling along the way.

Each of the individual's assignments in his work situation should be supervised by a man who has already proved his leadership ability, who is genuinely interested in developing others, and who is familiar with the objectives of the assignment in relation to the needs of the candidate. The assignment should be planned to provide experience which will not only increase the candidate's know-how, but which will also provide an opportunity to strengthen his weak points or further develop his specific abilities.

G. E. Review

P. R. HEINMILLER

Mr. Heinmiller is Managing Editor of the General Electric Review.

“ . . . There is more writing in industry than turning out technical reports. There are letters and memorandums, reports and articles to associates in your field of engineering, and what is most difficult of all, presentations to management. I say 'most difficult of all' because you must get your ideas across to non-engineers, and you cannot take refuge in technical jargon.

When writing signed articles for

technical publications, you must: know your audience, write so your audience can understand you, and keep everything in a logical sequence. Be complete and concise, use active verbs, mix short sentences with long ones to give a change of pace, and avoid clichés. Start with an outline and then fill it in.

All other things being equal, the engineer who is articulate, who is able to express himself orally and in writing in an understandable manner, will gain more prominence than one who cannot. (I prefer the word "prominence" to "success," because the latter has conflicting definitions and often carries a high price tag.)

*at Case Institute of Technology,
Cleveland*

H. M. ROZENDAAL

Dr. Rozendaal is Manager—Biological Studies Section, General Electric Research Laboratory.

“ . . . Engineers and physicists have contributed much to technics in medicine and biology. Many of their efforts have been in the field of medical physics or biophysics. They have led to the discovery or development of apparatus, such as electrocardiographs, x-ray machines, diathermy equipment, electron microscopes, analytical apparatus using ultraviolet and infrared light, to mention only a few. Drs. Whitney and Coolidge in our Laboratory have been pioneers in this field and their contributions are known to every physician.

And now atomic energy has seriously affected medical diagnosis, medical therapy and biological research. New apparatus is being introduced to medical personnel. New devices for more accurate measurements and localization of radioactive isotopes in the body are needed. In these and allied fields, the engineer,

the medical man and the biologist have many interests in common. We must encourage these people to get together to explore problems of mutual interest. Such an approach will be of interest to the scientists but, much more important, it may result in developments of great benefit to our patients.

*Institute of Radio Engineers,
Syracuse, N. Y.*

H. F. MILLER

Dr. Miller is Manager—Advance and Development Engineering Services Division

It is estimated that at present there are about 100-million acres of worn-out land in this country. Bringing this land back to productivity is one of the major tasks that must be undertaken.

This will require vast quantities of the nitrogen-, phosphorus-, and potash-type fertilizers. But apart from this, recent discoveries have shown that it is possible not only to alter the chemical composition of soil but also its physical composition—characteristics such as porosity, density, texture, and moisture retention. Small quantities of organic materials—the "soil conditioners" as they are called on the retail market—are capable of doing many of the things that only humus in the soil could formerly do.

In the next 25 years the need will also arise for other chemical additives needed for the soil to support the growth of the mold or the fungi now present in humus. There is conjecture that soil molds and bacteria play a great role in transferring nutrients from the soil to the roots of the growing plants. This is a chemical industry—not now in existence—that could be breath-taking in scope.

G.E. Review

You can put your confidence in—

GENERAL  ELECTRIC

WHERE TO RETIRE TODAY —AND ENJOY IT

by Norman D. Ford

If there is anything I have found out in traveling up and down this country and throughout the rest of the world, it is this: It costs less to retire than you may think it does—*provided you know how to discover those places where it costs less to live the kind of life you like.*

As founder of the Globetrotters Club, I made it my business to find low-cost beauty spots all over the world. Right here in the U.S., I found places where the cost of living is surprisingly low — and you can get a part-time or seasonal job if you must pad out your income. Here are just a few of them.

Do you know where to find

- the greatest retirement bargain in Florida?
- the most beautiful town in all California?
- the three top-notch retirement towns in the Southwest?
- the one place in America where university experts have found the most healthful climate in the world?
- that marvelous Maine island, where it's 10-15 degrees warmer in winter than on the mainland, and living costs are so low they attract many who otherwise could not afford to retire?
- a health spa, with wonderful facilities for recreation, surrounded by a national park?
- the ideal island for retirement in the South, with cool summers and warm winters?
- the most "cultural" small town in America, with a Little Theatre, art and music clubs, a cosmopolitan atmosphere?

Of course, these are only a handful of the hundreds of beauty spots, hideaways, and larger communities in the U.S., where you can retire now on little money and enjoy yourself completely.

And in the rest of the world, there are hundreds more besides. Just a few of them:



NORMAN D. FORD

Mr. Ford has helped thousands to find the right place to retire on their present income. Hundreds come to him for advice. Typical letters:

Could you suggest a quiet modest and inexpensive seacoast town with a good beach and fishing where I could retire within 100 miles of New York City?

Is it possible to buy a rural 5-room cottage on an acre of ground near the southern Gulf Coast of Florida for \$3,000?

Where can I find a clean, friendly city with a climate that's mild and it's sunny the year around?

I have a highly strung, nervous type of constitution; I also suffer from pleurisy. I would like to retire in a medium-sized city with plenty of cultural opportunity. What can you suggest?

Is it true that you can live like a king in Majorca for less than \$35 a week for two? How do you reach Majorca?

Do you know of any city in Mexico where prices have not risen, and I can find other retired Americans?

The facts to answer these typical questions and hundreds more are given in Norman D. Ford's wonderful books, "Where to Retire on a Small Income" and "Bargain Paradieses of the World."

- *The Azores or the Canaries*—tropical flowers, sandy beaches, and the charm of Old Spain are combined here—with rents of about \$20 a month, groceries for a couple at \$10 a week, and servants \$5 a month each.
- *The lotus-covered mountain lakes of Kashmir*, where a furnished houseboat with four turbaned servants rents for \$70 a month. Total costs for a couple run about \$175 a month—in the most beautiful spot on earth.
- *The South Seas?* Tahiti has found out about the Yankee dollar. But there's brilliant Sigatoka Beach at Suva or reef-girt Norfolk or Lord Howe Island, the Bargain Paradieses of the South Seas today.

So I say again — you can retire now, while still young enough to enjoy it — if you know where it costs less to live the kind of life you like.

—O—

(In the next column, read about two books by Norman D. Ford which tell you just this.)

TO RETIRE YOUNG ENOUGH TO ENJOY IT

—read these books by Norman D. Ford

WHERE TO RETIRE ON A SMALL INCOME

This book selects out of the hundreds of thousands of communities in the U.S. and its island territories only those places where living costs are less, where the surroundings are pleasant, and where nature and the community get together to guarantee a good time from fishing, boating, gardening, concerts, or the like. The book never overlooks the fact that some people must get part-time or seasonal work to pad out their incomes.

It covers cities, towns, and farms throughout America—from New England south to Florida, west to California and north to the Pacific Northwest. It includes Hawaii, Puerto Rico, and the American Virgin Islands. Some people spend hundreds of dollars trying to get information like this by traveling around the country. Frequently they fail—there is just too much of America to explore.

Where to Retire on a Small Income saves you from that danger. Yet the big 1954 edition costs only \$1.

BARGAIN PARADISES OF THE WORLD

This is a book on how to double what your money can buy. For that is what spending a few weeks or months, or even retiring, in the world's Bargain Paradieses amounts to.

Throughout you learn where to spend a while in the West Indies, Mexico, Central and South America, the healthful islands of the South Seas, the wonderlands of New Zealand, the Balearic Islands, the Canaries, Madeira, etc.

You read about "Lands of Eternal Springtime," "Californias Abroad," "Islands in the Wind," "Four Modern Shangri-Las," about mountain hideaways, tropical islands as colorful as Tahiti but nearer home, about modern cities where you can live for less, about quiet country lanes and surf-washed coastal resorts.

About 100 photos, 4 maps. 1954 edition. Price \$1.50.

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I have enclosed \$..... (cash, check, money order). Please send me the books I checked below.

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