

## Salesman with a fundamental approach helps his company get into the black after two years of ammonia plant operations

E VERYONE ADMITS IT. Ammonia markets today are crowded with producers. It's tough getting enough orders to keep plants running at full design capacity.

At Grace Chemical Co., however, engineers are pushing their Memphis unit 25% above rated capacity. And after two years of operation, the company is showing a profit—quite a feat these days for a new organization in the ammonia business.

Feats like this aren't accomplished without a lot of planning on the part of some very good men—like Robert Parks, general sales manager at Grace.

Parks' interest in agriculture dates back to his boyhood days, when his father was with the Salt River Valley Water Users' Association. Later, Parks' specific interest in chemistry and its application to practical agricultural problems was sparked by T. F. Buehrer, head of the agricultural chemistry department at the University of Arizona. At that time, however, Parks concentrated on irrigation, salinity, and soil physics.

Two people at Ohio State had a profound influence on Parks at the graduate study level. They directed his interest into the broad field of crop rotation and fertilization. Original thinkers and outstanding scientists of their time, these men (the late R. M. Salter, then head of the agronomy department and subsequently chief of the Bureau of Plant Industry, Soils, and Agricultural Engineering, USDA, and L. D. Baver, now director of the Hawaiian Sugar Planters Association Experiment Station) imparted a philosophy of putting scientific theory into practice.

When Parks left Ohio State and joined the USDA in 1942, he applied this philosophy to the study of soils, fertility, and plant nutrition.

While supervising soil management projects in the Southeastern states for USDA, Parks was associated with what he considers one of the most important recent contributions to U. S. agriculture. He refers to the joint USDA-North Carolina Experiment Station project on corn fertilization.

This project took corn production out of an agricultural rut that had existed for 50 years. Previously, agricultural workers had studied nitrogen fertilization of corn with wide plant spacing, and found low rates of nitrogen to be best. Other experiments compared various plant populations at low nitrogen rates and showed wide plant spacing gave best yields. At that time it was therefore assumed that lack of moisture (instead of nitrogen) was limiting corn yields in the Southeast to levels between 10 and 20 bushels per acre.

Combining the two variables on nitrogen fertilization and plant spacing, researchers found they could use 100 to 150 pounds of nitrogen per acre in combination with a plant population of 7000 to 10,000. Peracre yields were boosted to 75 to 100 bushels per acre on "20-bushel" corn land! This discovery changed both research workers' and farmers' approach to nitrogen fertilization problems and gave the Southeast a grain production potential far beyond its most extravagant dreams. The results, surprisingly, were substantiated during the first year of this project with several dozen experiments under different soil and weather conditions.

## **Balanced Sales Pitch**

Parks admits he learned a lot from this work—even more than he contributed to it. The project really impressed Parks with the results one could get from nitrogen fertilization. It also proved there is no one "cureall" in any fertilization program.

This philosophy, Parks says, underlies Grace Chemical's sales program a "balanced sales pitch" tailored to fit the scientific facts of balanced fertilization. Grace salesmen give proper credit to other forms of plant foods, and sell ammonia and urea by showing how nitrogen fits into the over-all picture.

When Grace Chemical Co. came into the direct application ammonia market in 1955, it seemed to Parks that many basic producers were vying for dealers and distributors as customers, and not selling the farmer himself on using ammonia. So Parks decided his company should put its major effort in this field to helping the dealer and distributor more effectively to sell ammonia to the farmers.



**Robert Q. Parks** 

Born Oct. 12, 1915, at South Lyons, Mich. Agricultural chemistry, Univ. of Ariz., B.S. in 1937; M.S. in 1939; Ohio State Univ., Ph.D. in agronomy, 1941; instructor in agronomy and asst. agronomist, 1940-42. With USDA 1942-53: Assoc. Soil Chemist, Bureau of Plant Industry, Ithaca, N. Y., 1942-44; Soil Scientist, Bureau of Plant Industry, Soils, and Agricultural Engineering, Beltsville, 1944-45; Sr. Soil Scientist, Auburn, Ala., 1945-47; Principal Soil Scientist and Asst. Head, Division of Soil Management and Irrigation Agriculture, Beltsville, 1947-51; Head of division, 1951-53. Mgr. of Agricultural Service, Grace Chemical Co., Memphis, Tenn., 1953-55; General Sales Mgr., 1955 to date.

series of sales aids, which actually deemphasized the Grace name at the expense of promoting the dealer and distributor's name and products. It worked like a charm. Parks won't say how many valuable contracts this program cornered, but other companies are now out with their own ammonia sales aids.

Hard to beat on predicting ammonia markets, Parks often wins a free lunch from one of his associates on this score. In the early '50's he headed one part of a government team which forecast nitrogen consumption with this prediction: Agricultural usage will increase from 1 million tons of nitrogen annually in 1950 to 2 million tons in 1955. When the results rolled in a few years later, the 1954–55 fertilizer season rang the bell for 1.96 million tons!

Parks is now predicting that agricultural nitrogen consumption can be boosted 5 to 10% a year for the next five years. It will go even higher than this, he says, if companies will continue their research and educational efforts and step up their selling programs. "We aren't beating the bushes hard enough," says Parks. "In the case of direct application ammonia, for example, we are experimenting with several techniques for backing up distribution systems with a more aggressive sales program directed at the farmers."