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Dad's in the Garage: Santa Barbara Physicists in the Long 1970s

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American physicists faced many challenges in the 1970s: declining research budgets; public skepticism of scientific authority; declining student enrollments; and pressure to shift to topics such as biomedicine, environmental remediation, alternative energy, public housing and transport, and disability technologies. This paper examines the responses to these challenges of a small group of Santa Barbara physicists. While this group is not representative of the American physics profession, the success and failure of their responses to changed conditions tells us something about how American physicists got through the 1970s, and about the origins of some features of American physics today. The three physicists examined here are Philip Wyatt, David Phillips, and Virgil Elings. In the late '60s, Wyatt left a defense think tank to found an instrumentation firm. The Santa Barbara oil spill and other factors pushed that firm toward civilian markets in biomedicine and pollution measurement. Phillips joined Wyatt's firm from UCSB, while also founding his own company, largely to sell electronic devices for parapsychology. Phillips was also the junior partner in a master's of scientific instrumentation degree curriculum founded by Elings in order to save UCSB Physics' graduate program. Through the MSI program, Elings moved into biomedical research and became a serial entrepreneur. By the 1990s, Wyatt, Phillips, and Elings' turn toward academic entrepreneurship, dual military-civilian markets for physics start-ups, and interdisciplinary collaborations between physicists and life scientists were no longer unusual. Together, their journey through the '70s shows how varied the physics' profession's response to crisis was, and how much it pivoted on new interactions between university and industry.