Honeywell
The First 100 Years

Centenary brochure 1885-1985
1935: Established company in Great Britain.

1943: Experiments in electronics lead to development of the first successful automatic Honeywell system.

1945: Honeywell purchases Micro Switch of Freeport, Illinois, manufacturer of a line of map-action electric switches.

1950: Honeywell buys railroad 40 percent interest in National, manufacturer of the first commercial computer.

1954: Research laboratory develops germanium power transistor. Transistor Division is formed in Minneapolis.

1957: Honeywell buys Digital Computer Corporation and creates the Digital Division to produce the D2000 computer. The first system is sold and installed.

1965: Total Honeywell sales exceed $1 billion for the first time.

1975: Process Control Division introduces the DDC 2000, a unit-wide process control system, the first incorporating microprocessors.

1981: New Honeywell Bearcat IC is adopted.

1983: For U.S. Department of Defense VHSIC (Very High Speed Integrated Circuit) program, Honeywell develops a chip containing 8,500 transistors and diodes, the most complex bipolar circuit ever built.
A hundred years ago an unassuming inventor named Albert Butz applied the principle of feedback to an apparatus that opened and closed the damper on home furnaces. From that principle grew automated control, and the company we know today as Honeywell. While Butz's invention was the spark for the company it is the people of Honeywell who, like fine threads woven through a brightly colored tapestry, make up its history, its lore and its soul.

What we have provided here are some recollections from the first 100 years of life at Honeywell. These are snippets from the past which introduce people like the 1920s door-to-door salesmen who sometimes gave more than their all; the Canadian with hair like flame and a temperament to match who helped launch the company on its international journey; the president who was trained by trial and error; and a Tom Sawyer who grew up to spend all his days in the Honeywell family.

We've made no attempt to write a definitive history. Rather, we've tried to give you a scrapbook filled with snapshots of the people who built the Honeywell we know now. For in knowing who we were in the past we know who we are today, and who we will be tomorrow.
In The Beginning

In 1885, Albert Bute invented his "shamper tapper." He had no idea it was the seed of a company that would grow to reach around the earth and into space. Bute was a woodworker who was happiest at his workbench.

Bute was born in Switzerland in 1849. He came to this country with his parents as an 8-year-old boy. At 15 he enlisted in the 77th Wisconsin Infantry of the Union Army and served six months until the end of the Civil War. Of his experience, Bute wrote, "Having no battles to fight and nothing to do but drill, the most important event that took place was riding the captain on a rail out of camp for neglect of his company and too free use of liquor."

Bute disappears from recorded history until 1883 when he shows up in St. Paul as a subscription book salesman for G.W. Horton and Company. Three years later he and a partner formed Bute and Meadins' Hand Grenade Fire Extinguisher Co., a firm which manufactured glass spheres filled with water which hung from ceilings in basements. When fire broke out the basins would burn, the spheres would drop to the floor and break and, theoretically, the water would extinguish the fire. Meanwhile, Bute was at his workbench tinkering with a spring motor equipped with a crank arm that would operate chains or wires to adjust the dampers of a coal-fired furnace or boiler in response to the demand of a room thermostat. The purpose of his invention was to maintain an even temperature in the home and...
relieve the home-owner of the tedious jobs of opening and closing the damper by hand. Because of the way it worked, Bult's gadget became known as a "damper flapper."

It looked promising. He and a group of investors formed Bult Thermostatic Electric Regulator Company to manufacture his damper flapper in a twenty-four-story building in what is now downtown Minneapolis.

The year was 1888.

Demand for the damper flapper was not overwhelming. Homeowners had to go to the cellar to put coal on the fire anyway—and to make matters worse, few furnaces and boilers were installed at the time had the type of bit dampers that could be connected to the device. Furthermore, Al Bult was no trained or a salesman. In fact, it's doubtful many were sold at all.

The next we hear about him is in 1903 when he moved to Oak Park, Illinois, where he went to work for Chicago Heat Regulator Company. Upon his death in 1904 his obituary said, "he had been an inventor for many years, and had only recently perfected a heat regulator, which was recognized by experts as of great value."

Before leaving for Oak Park, however, he sold his patent for the damper flapper to his attorneys, Paul Menard and Sanford, and the patent remained in the Twin Cities until it formed the basis for the company that would eventually be called Honeywell. Bult's patent was the first application of the principles of feedback control which is the basis for the science of automated control, an industry that would transform the world.
Diary Of A Patent Suit
ust after the turn of the century the industrial revolution was in full swing, commerce was growing, the country was expanding westward, and eager inventors were filing dozens of patent suits each month in federal courts. Among those involved in a suit was the Electric Heat Regulator Company of Minneapolis, a predecessor of today's Honeywell Inc. In October 1911 the officers of the Jewel Manufacturing Company of Elgin, IL, filed suit in a United States District Court in Massachusetts charging that Electric Heat Regulator had infringed on a heating thermostat patent that had been acquired, or assigned, to Schaefer Bros. in early 1910.

Jewel marshaled some strong evidence. There was the note to Jewel, dated February 7, 1910, from J.C. Kerr, United States Patent Commissioner. "Gentlemen," it said, "in even precise words, I recently purchased a house in which there is one of your contrivances but it is disconnected and does not work. Please send me directions for connecting it up and making it work. It was for $1,000 and gave Kerr the Minneapolis company's address. There was also the September 29, 1910, letter to Jewel from W.H. Wilson, brother-in-law to the Minneapolis company's president.

Mr. Sweet told him that his insurance company's lettered, which said, "Please send me full particulars regarding your Heat Regulator. The cost of one and whether it can be installed readily by a novice. Please give full particulars." But the Minneapolis company had a strong defense of its own. Company officials argued that their clock thermostat, called the "Jewel Simple Nutator Three," had been in use in the Sweatt home as early as September 1899. It backed up their defense. Judge Charles Pollock of Fitchburg, North Dakota, handed down a decision on the suit, which was settled.

Mrs. Swett testified: "I remember it very well, my husband, Mr. Swett, of the thermostat. I had in referring to my diary that I had an entry under the day of Sunday, September 16th, 1911, which was as follows: 'Ruth brought Judge Pollock home from church.' Apparently in the face of such good accounting, Benjamin C. Wickers, president of Jewell, was persuaded of his case, and he wrote, as strong as he had hoped it, that "Mr. Wickers and Mr. Sweet agreed to settle before the case ever went to court..."

In fact, the Minneapolis company was so impressed with the Jewel thermostat that it paid Jewel $15,000 for a license to manufacture the instrument. It was further agreed that Jewel would be paid $10 for each and every thermostat that would be manufactured without notice of the lawsuit; a penalty which took on even greater meaning 30 years later when, in a similar suit of the late Honeywell Heating, Solar, Inc., a company with rival of Electric Heat Regulator Company, bought Jewell's instrument line. The case became moot, however, in 1927, when the two companies merged.
To Fire And Forgive

Every company has its inside jokes. In the 1920s, a legend is woven from stories exchanged by Honeywell people. An uncommon number of them, it developed, had, at one time or another, been fired and rehired, sometimes all in the same day. There are so many stories about this phenomenon that there developed an informal club of employees who could talk about their trip through the revolving door. But none demonstrates the legend as well as the tale about the young man in New York.

One early morning in 1929, a very distinguished gentleman appeared in the Minneapolis Heat Regulator office in Grand Central Terminal in New York City. He arrived at 8 o'clock, and since Walter Wilson, who was service manager, didn't get in until 9, he let himself in to Wilson's glass-paneled office, put his feet up on the desk, lit a cigar (pointing against the rules at the time) and proceeded to read the morning paper. Fred Kaser, Wilson's constant, was in charge of the office at that hour. He wondered about the strange fellow in Wilson's office, but he had several service men to dispatch and no time to inquire.

At 9 o'clock Wilson arrived at the office and shook hands with the chap who had encircled himself in his
At 10 o'clock the buzzer rang three times, which was the signal that Wilson wanted to see Kaiser. Without pausing for introductions, Wilson asked Kaiser to describe the troubles their customers had been having with a valve and the solution he had devised during the previous weekend. Kaiser explained his idea to his boss and the anonymous visitor and finished with the remark that he didn't think the engineer from Minneapolis who had suggested a different solution knew what he was talking about.

"I don't give a damn what you think," the distinguished gentleman told him. "You're not paid to think. You're paid to do what you're damned well told to. Get out of here. You're fired!"

Kaiser, shocked and excited, collected his papers, his umbrella, and his hat and said good-bye to the office staff, then hailed a cab for the other end of the building. He still had a few hours to put in the stockroom before he had to leave. When he told the boy he had been hired, the boy asked why he had fired him.

"I don't know," Kaiser replied truthfully.

Just as he was leaving Wilson and the gentleman came to the stockroom and asked him to explain again what the trouble was with the valve.

Picking up a sample valve that was being tested in the stockroom, Kaiser showed the two men how his theory worked. When he was through, the gentleman asked him if he would continue to work out his ideas and send personal reports directly to him in Minneapolis.

"Who are you?" Kaiser finally found the courage to ask.

"I'm W.R. Swift and I own this company," he replied. "You're hired. How does $80 a month sound?"

Kaiser went back to work and remained with the company 45 years, rising to corporate vice president in field marketing for the southern region.