

Portable Electrocardiometer Aids in Study of Heart Disease

By JAMES DOYLE
United Press International
PORTLAND, Ore. (UPI) — I watched my heart beat, in the form of a wavy green line on a screen, going 60 times its normal speed in a demonstration of remarkable new equipment for the study of heart disease.

Doctors working with the equipment believe it is the most significant step in research of the heart in recent medical history.

The green line formed on an oscilloscope screen and then danced and jiggled for 10 minutes. It represented a 10-hour chart of my heart action during part of a normal work day and hours after work.

A 10-hour electrocardiogram (EKG) during periods of normal activity had never been possible before the development of the portable electrocardiometer.

The recorder is carried over the shoulder like a camera case — with electrodes attached to the chest — while a tape inside moves slowly, noting beat-by-beat the heart's changes and damage — if any. But, by means of a "rapid read-out system," it can be scanned in 10 minutes — speeded up on an electronic scanner to 60 times its normal rate.

Audio Signal
Along with the visible electrocardiographic impulse, an audio signal is emitted which sounds like a car in low gear — until the heart activity speeds up. Then it sounds like that far turn during the Indianapolis 500.

The equipment is used for preliminary analysis. A more detailed examination is made on a third unit of the equipment.

The equipment is at Portland's St. Vincent hospital in a new department called a cardiac telemetry station. It is the first such station on the West coast, and one of the first in the world. It was opened July 17 under the direction of Dr. Herbert J. Semler, a cardiologist on the hospital staff, and



RECORDS HEART ACTIVITY—James Doyle, of United Press International goes casually about his duties with a portable electrocardiometer strapped to his body in Portland, Ore., recently. The electrocardiometer records one's heart activity during normal activity and is used for a preliminary analysis of heart condition. (UPI)

a former Mayo clinic physician.

Dr. Semler says the equipment here is being used primarily for research until more is known about it.

To demonstrate how research of this nature is done, Dr. Semler attached the recorder to me for a 10-hour period and acquired a more complete record of my heart than has ever been obtained in any previous examination.

Had Conventional Test
Before I wore the recorder, however, Dr. Semler and his technician on the cardiac project, Mrs. Bernice Platt, put

me through the paces on the conventional EKG and a radio-transmitted electrocardiogram.

The transmitter unit was the step in heart research that preceded the recorder. Its prototype was used at Cape Canaveral, where cardiac telemetry is known to be used for monitoring the heart action of astronauts in orbit.

During the time I wore the recorder I jotted down on a "diary" what I did and at what time. This would be matched later with the heart action as recorded on the tape.

The wavy green line I watched looked like a sharp-peaked

mountain with a nearly level floor beside it. One beat after another was superimposed at high speed. When one of the beats, or "mountains," jumped outside the line of superimposition, Dr. Semler could note its formation and the time it occurred so that it could be matched with my diary to see what caused it.

While my own heart appeared normal in the tests, Dr. Semler said the cardiometer has already turned up abnormalities in persons who have never suspected any heart trouble.

No Evidence Found
Frequently, he said, a person will complain of a flutter or chest pain and make an appointment for a standard EKG. But when it is taken, with the person at rest or inactive, there is no evidence of heart damage. The standard equipment which has been in use for many years as functional only when the patient is at rest. However, heart trouble may show up mainly during periods of activity or stress.

"We could never follow anyone's heart action for 10 hours a day unless we had a finger on their pulse all that time," Dr. Semler said.

"With the new instruments, it is now possible. We think this is going to have a tremendous impact on the nation's health."

By "we" he meant himself

Two Accidents Checked by Police

John Harold Greb, 25, of 5170 Table Rock rd., Central Point, was cited by state police for failure to yield the right of way following a two-car accident on Stewart ave. and Kings highway Friday.

Greb was passed for minor injuries and his passenger Tammy Lynn Greb 2, was treated for head cuts at Rogue Valley hospital and released.

According to police the Greb car started to turn left onto Kings highway directly in front of a car driven by Walter Abbot Emerson, 53, of route 1, box 217, Talent.

A car driven by Latham Craig Wright, 21, of 5321 Jacksonville highway, knocked down 38 feet of wood fence on Biddle rd., near Hilton rd. Friday, state police reported. No injuries were noted.

The Wright car was passing a car driven by Charles Louis Moore Jr., 38, route 1, box 23, Rogue River, as the Moore car was attempting to turn into the Medford Meat company, state police said.

Charles Norland of the U. S. Public Health service. All three men are working on a voluntary basis, with support for the project derived in part from the Frank R. Menne Research fund of St. Vincent hospital and the Oregon Heart association, plus voluntary contributions by persons wishing to see such research progress as rapidly as it has already.

Reliable Library
The purpose now is to gather a reliable library of heart charts and histories. The next step, and the one to which the station is gradually being directed, is to use the cardiometer as a diagnostic tool.

"We are getting useful data," Dr. Semler said, "but it has to be carefully evaluated first prior to its future in clinical medicine."

He wants completely analyzed files of healthy, and in some instances unhealthy, hearts before the recorder is put into clinical use. In time it will fulfill its function of finding coronary disease while it is treatable.

While we watched the green line on the oscilloscope, we matched notes I had kept in the diary. At one point, as I took a story on the telephone under pressure of a local deadline, the cardiometer told us my heart rate jumped up. The superimposition of the heart-beat picture changed slightly. The

audio scanner hummed at greater pitch.

Once as I raced across the room to grab a ringing telephone from a dead stop, the picture revealed that my heart abruptly leaped into a higher rate.

Later in the day I took a nap with the lightweight recorder still hanging around my shoulder. My heart rate leveled off to about 60 beats a minute — until I was awakened by a telephone.

The green line blipped and danced and then went back to a more normal configuration, but remained at a higher speed as I dressed and, later, as I drove through heavy traffic.

Had there been any abnormal action during the 10-hour period, it would have been clearly printed for the doctor to examine.

It is easy to understand why Dr. Semler holds the cardiometer as one of the most useful tools yet developed for the diagnosis and future treatment of the nation's number one killer — "heart attacks."



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Spiritual Leader of Mormon Church to Have 90th Birthday

SALT LAKE CITY (UPI) — White-haired David O. McKay, spiritual leader of two million members of the Church of Jesus Christ of Latter-day Saints, plans to observe his 90th birthday tomorrow by "just relaxing" at his boyhood home.

"I never felt better in my life and I mean it," he chortled with a twinkle in his blue eyes. "The only thing that worries me is that I get tired after working 8 or 10 hours a day."

Talking about his birthplace at Huntsville in northern Utah made him recall the past.

"I certainly gave my mother a lot of trouble as a little rascal," he said. "I'm extremely happy I was able to attend the dedication of a new chapel in Wales. It makes amends for my childhood capers."

The chapel dedication took place last month in Cardiff about 12 miles from the birthplace of his mother. The overseas roundtrip flight boosted his lifetime travel log estimate to at least one million miles by all types of transportation.

Missionary Activity
President of the Mormon church since 1951, McKay became acquainted with missionary activity at the age of seven when his father was called to serve in the British Isles for a two-year period. The family remained at the Huntsville farm to maintain the father in his missionary labors.

McKay followed in his father's footsteps shortly before the turn of the century after graduation from the University of Utah in Salt Lake City where he was class valedictorian. Later, he became an educator and in 1906 was called to serve as a member of the Council of Twelve Apostles of the church.

This was the start of fulfillment of a remark made years earlier to McKay by a Scottish leader in the church, who said: "If you are faithful, you will yet stand in the leading councils of the church."

In the ensuing years of his apostleship, McKay served in a wide variety of church posts, traveling far and wide in the world to spread the word of God. He also devoted time and energy to civic responsibilities on a local, state and national level, acquired business acumen and maintained avid interests in youth work, horses, automobiles and airplanes.

The prophecy issued in Scotland reached full blossom on April 9, 1951.

Becomes President
McKay was "sustained" by church members assembled in the famed Salt Lake City Tabernacle on Temple Square as president. As "prophet, seer and revelator" of the church, McKay became the ninth successor to founder and first Prophet Joseph Smith.

He brought the presidency a strong sense of individual freedom which he has retained through the years.

"I believe in freedom of choice for the individual," he said. "An individual can choose to be a saint or sinner."

"The individual is the center of all our activity. Our church stands for the salvation of the individual, not the group or state. That is what Jesus Christ has shown us."

McKay's belief in the freedom of the individual makes him a strong foe of what he describes as the "Communist conspiracy."

"My feelings would not be authoritative," he declared, "but since you asked, I must say I think the Communist conspiracy is one of the greatest

menaces in history. The individual inherently objects to being controlled by any one man or group. The Communist principle strikes at the freedom of man."

Asked whether he was pleased with the church's progress under his leadership, the tall, congenial McKay leaned back in his chair and, with a steely gaze through thick glasses, said:

"It's thrilling. There has never been greater spirit of devotion among members. I notice it time and time again on the recent trip (to Wales)."

"The progress of the church is most encouraging and it is due largely to activity of the laymen themselves. This is an individual's church."

A six-footer, McKay's physique has become slender with the passage of years. But the fiery spirit, devotion to the gospel, firm handshake, smile and warm friendliness to all comers are the same as in his youth.

Altogether it spells love in capital letters. He loves people and those who meet him can't help but return the love.

"In recent years," said one church official, "President McKay has shown his age, especially during informal talks. But, we've seen him talk formally to groups for a 45-minute stretch without any trouble."

And, in church business meetings he is sharp as a tack in running affairs. We have nothing but admiration for him."

Early Riser
McKay is an early riser, often at his desk at the church's headquarters by 6 a.m., when he isn't globe trotting. A steady stream of church leaders and visitors parade into his office during the day or McKay attends meetings scheduled to move the church forward in all phases spiritual and business enterprising activities.

McKay has no regrets that his years are passing. He smiled broadly and quipped:

"We used to have an order in the house not to use the phrase 'old age.' That is no longer true. We have welcomed it."

McKay's "we" includes his wife, Emma Rae Riggs McKay. They were married in Salt Lake City on Jan. 2, 1901 and until about a year ago his 86-year-old wife was his companion on nearly all his travels.

Of their seven children, all but one are still living. The McKay family also includes 21 grandchildren and 10 great grandchildren.

Many of them will be on hand at Huntsville to honor their earthly father who has instilled in thousands of persons in all lands a dedicated belief and worship for God.

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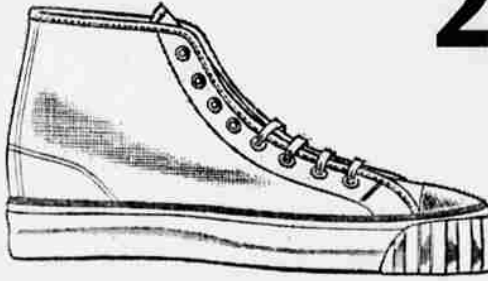
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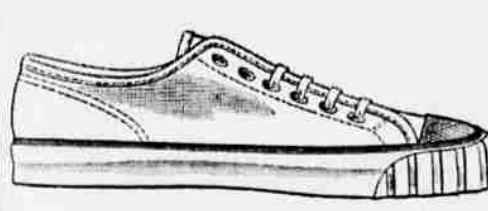
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