

Man's Balance Mechanism Subject Of New Research

By HARRY TRIMBORN
United Press International
NEW ORLEANS (UPI)—Marine Capt. Frank W. shot through the cloud bank at 7,000 feet, rolling out of the tight turn. The dials on the instrument panel of his jet fighter showed he was flying straight and level at normal cruising speed.

The plane was functioning perfectly. A minute later, the craft was a mass of twisted, broken metal strewn across a barley field. Capt. W.'s body lay lifeless in the tangled wreckage.

Naval authorities investigating the crash found no evidence that the plane had suddenly developed mechanical trouble. Neither was there any indication that Capt. W. attempted to bail out of the plane.

Except for a few clouds and an overcast that obscured the ground below, visibility was good. A trouble-free plane. A highly-trained pilot at the controls. The seemingly perfect combination for a safe flight that should have ended with a happy landing.

Instead, death and destruction. Why?

In a word—"Vertigo."
Thus does Dr. Cecil W. Mann, professor of psychology at Tulane University, explain the death of Capt. W.

"This aviator," Dr. Mann said, "thought he knew he was not flying a straight and level course when he pulled out of the cloud bank, although his instruments told him otherwise."

"The feeling that came from his body as a result of the maneuver told him he was in some posi-

tion other than straight and level. The feeling was strong enough and convincing enough to make him distrust his instruments. A fatal decision.

"Not believing what his instruments told him, the pilot decided to fly by the seat of his pants and attempted to 'correct' his flight. The crash was the result."

Capt. W. was a victim of vertigo—the momentary loss of the sense of balance and equilibrium. Flying a supersonic plane, in which split-second decisions are a matter of life and death, Capt. W.'s error in judgment proved fatal.

His is not the only case. A young ensign, who experienced vertigo, but lived to tell about it, said he had found himself flying off in the wrong direction when his Sabrejet dropped a thousand feet in a sudden downdraft.

"First thing I knew, I seemed to be banking to the left, but actually I was turning right," the ensign told Dr. Mann. "And I thought I was flying to the north, but I was heading east."

The ensign's brief encounter with vertigo is of great importance to Dr. Mann. He is doing research, under the auspices of the Office of Naval Research, to find ways to counteract vertigo and to learn the essential functions of the balancing mechanism in human beings—the semicircular canal which is attached to the inner ear.

"Man is an upright, moving animal," the Australian-born psychologist noted. "But when you spin him around and make him turn somersaults, he loses some of his sense of balance. In other words, he suffers from vertigo."

Vertigo, he emphasized, doesn't mean dizziness. A person experiencing it can be clear-headed in all respects, except that he feels he is not in his normal, upright position.

The phenomenon, called Meniere's Disease when it is permanent because of injury to the semicircular canal, hits all people briefly at one time or another, Dr. Mann said.

It can hit you in an elevator, on a carousel at an amusement park or when you're doing a sudden about-face.

What happens, the scientist said, is that when a person is moving in a certain direction a fluid in the body's semicircular canal presses against nerves that signal the brain, telling it the direction of movement.

For example, suppose you are in some sort of vehicle that is spinning you around. The body is in motion and the pressure of the fluid, after overcoming inertia, tells you the direction of movement.

Then the spinning stops suddenly, but the fluid, because of the momentum, continues to move. This gives you the very real feeling that you are still in motion.

To test the effect of motion on the body's balancing regulators, Dr. Mann has in his laboratory at Tulane a contraption that looks like an electric chair. It can be made to spin in any direction at various rates of speed. A man is seated in the chair and the machine is put through its paces by remote control.

Dr. Mann, by means of other equipment, records the man's reactions.

With man about to venture into

menhous importance.

"The work we are doing now," he said, "will be worthwhile if it offers even one clue to a better understanding of the human being and make it easier for him to adapt to his changing environment."

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PANELING IS TIMELESS — The plank and beam ceiling and walls of ponderosa pine give a feeling of old-fashioned comfort to what is essentially a contemporary decor in this hospitable and beautiful living room. The paneling complements the stone fireplace and the bright braided rug contributes pattern interest and warmth.

Modern Paneling Borrows Themes, Contours Of Past

Style often is borrowed from the past. Good line, texture, and color simply are adapted to contemporary thinking or used in new ways. Nowhere is this more in evidence today than in the beautiful wood paneling that appears in virtually every room of the house.

For example, the ultra-modern living room can still have an old-fashioned lived-in feeling by virtue of rough-sawn paneling on the walls, or a contemporary dining room can be given an old-time atmosphere with walls of knotty western pine. Built-ins of matching lumber contribute to the effect.

Another excellent example of an old style used in a new way, is the plank and beam cathedral ceiling. Traditional in principle, the effect is entirely modern when the beam at the peak of the ceiling is set off-center. True, the

decoration? The answer is break-fast bars, storage cabinets with lazy susan shelves, and other well-planned built-ins made of lumber from the western pine region. This "old" material is putting new life, color, and warmth into kitchens that are up-to-the-minute in modern design.

There is one room in the house, however, where paneling is being installed more than ever. There is no history of decorative wood paneling being used extensively in bathrooms anywhere until recently. This was simply due to the fact that bathrooms have been clinic-like and cold. But today excellent commercial sealers allow unlimited use of decorative wood despite high humidity conditions. By treating your paneling before you install it you can be sure that it will last for years with little care even though exposed to extreme dampness. With this innovation it can really be said that paneling is being used in every room of the house from attic to cellar.

What else is modern in kitchen