

COMPTON FINDS NEW COSMIC RAY FACTS

"AORANGI TESTS MOST PRECISE IN HISTORY"

By BOB BOUCHETTE

There was a pot of cosmic rays at the end of the rainbow flight of Dr. Arthur Holly Compton, world-renowned physicist and discoverer of the cosmic ray.

He looked up at me yesterday from his examination of the cosmic ray meter on board R. M. S. "Aorangi" and said:

"With this machine we have been able to obtain the most precise information on the cosmic ray that has been yet possible in history."

But to questions as to what specially had been discovered; whether he found that more cosmic rays struck the northern hemisphere than the southern hemisphere; whether he had come close to determining their density; whether he had obtained sufficient facts to reveal the history of the universe; and how this would affect science, Dr. Compton offered a smiling silence.

"That is just what I don't wish to say now," he said. "You see I'm reading a paper to the National Academy of Science in Chicago next week, and another before the American Physical Society in two weeks, and I will touch on these points."

"I don't want to spoil my lectures by talking in advance."

WHIRLWIND TRIP

Compton, built more like a football player than a scientist, winner of the Nobel Prize for Physics in 1927, and now, at 43, the most distinguished lecturer on physical science at the University of Chicago, made a whirlwind trip to examine the two-ton cosmic ray meter which he set up on "Aorangi" last January.

He left Chicago by plane on Sunday, was fogbound and transferred to rail; took another plane on Monday, slept on board and landed in Seattle on Tuesday morning.

At 11:05 a Canadian Airways plane landed him in Vancouver.

At 3:15 he was outbound on another Canadian Airways plane, and is home again today.

He caught the return plane with seconds to spare, having left "Aorangi" by automobile at 2:48.

After arriving in the city Dr. Compton completely disappeared from view until he arrived on board "Aorangi" at 1:20.

REPAIRS METER

He was driven from the airport by Leslie Code, teacher in the Vancouver technical school and a student under Dr. Compton in Chicago last summer.

An electrometer, which is part of the delicate apparatus to trap the cosmic rays, was out of order.

Compton peeled off his coat and went to work on it in the laboratory of James Stott, of the Dominion Government Electrical Standards branch. Shortly after one the electrometer was right again.

Still Dr. Compton was in no hurry. Arriving at the ship he asked a press photographer not to "shoot" him until he had shaved, then with Code lunched on board as the guest of Chief Officer R. N. Turner.

It is Turner who has been in charge of the machine since its installation. He has taken readings twice daily and sent them on to Compton at Chicago.

A 10-to-20-year sentence in Attica Prison was imposed on Louis F. Blanchard, 37, Vernon Center, in Utica county court today by Judge Ezra Hanagan. Blanchard, a second offender, accused of stealing clothing valued at \$51 in Utica July 16, was one of several defendants who were sentenced today. All had previously admitted the charges against them.

SPLENDID RESULTS

Up in the light-proof house on "Aorangi's" poop Dr. Compton radiated satisfaction from a freshly-shaven countenance.

"The results are splendid," he said. "They are better even than I anticipated."

"We had been able to follow the progress of the experiments by Mr. Turner's readings, so the purpose of my flying trip here was really to discuss plans for further experiments in the South Seas."

"The meter will remain in the Vancouver-Australia latitudes for another three months, and then we will try it south from Sydney."

Dr. Compton, who had not seen the meter since "Aorangi" left Honolulu in March, will not inspect it again, probably, until the end of the South Sea experiments.

"Mr. Turner is in complete charge," he said.

ELEVEN-YEAR TEST

Turner reads from a meter which records the presence of the rays by means of faint electrical impulses translated into light rays, which then impinge on a photographic film.

The entire series of experiments in different parts of the world will occupy eleven years, the sun-spot cycle.

The apparatus has been shielded from radio-active rays by more than a ton of small lead shot.

When the door of the cosmic ray house was locked again, although the time was getting short, Dr. Compton was still unhurried. He posed for pictures, then photographed Turner with his own camera.

They repaired to Turner's cabin, then Dr. Compton took a smiling and leisurely departure.

Presumably the trip in Code's car to the airport was at a considerably faster tempo.

But what are minutes, I thought, to a man who is investigating a ray which may come from an outer space so vast that it has taken all the ages for it to reach the earth.

The cosmic rays, as Dr. Compton explained, have no present dollar and cents value. They are at present only of scientific importance.

But the discoveries of today may be utilized by generations yet unborn, and Dr. Compton, with his dreamer's eyes and broad, intellectual forehead, thinks in terms of the centuries.

MAN, IN TIME, MAY BE REBUILT

"Inductor" in All Embryonic Tissue Repairs Ravages in Body.

Professor Hans Spemann of the University of Freiburg, Germany, and Professor Ross G. Harrison of Yale have contributed recent research revealing the existence in all embryonic tissue of an "organizer" or "inductor," whose role it is, according to the New York Times, to mold the primordial protoplasm of the egg into the particular animal species from which the egg originated.

More recently Professor Oscar E. Schotte of Amherst college presented startling evidence before the National Academy of Sciences that this organizer, or "sculptor of life," instead of stepping out of the picture after the animal had passed its early embryonic stages, remains with the animal throughout its life.

It is ready to spring into action at any time it may be needed to do repair work, and capable, according to Dr. Schotte's belief, of rebuilding the entire animal anew out of connective scar tissue, if only the proper conditions for such rebuilding could be provided.

What such conditions are is at present one of life's great mysteries, and Professor Schotte thinks it may take 100 years for man to wrest it from nature.

According to Professor Schotte, some day the proper methods may be found to enable man to rise, phoenixlike, out of his own ashes, and to achieve a real immortality in this world rather than the next.