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SANTA BARBARA • SANTA CRUZ

DEPARTMENT OF PHYSICS

SANTA BARBARA, CALIFORNIA 93106

1/13/88

Dear Basilis,

Would you believe that our Santa

Claus story would resurface 10 years
later? I'm enclosing a copy of ang article
appearing in a Cabrado Paper, sent
last month

by Richard Hansen.

Hope everything is going well with you.

Best wishes,

Jary

Arvada Sentinel Dec. 1987

## No pause for Claus, he warps gifts

here still are some things I'd like to know about Santa Claus.

No, Virginia, I'm not cynical, Kringle still makes me tingle.

It's just that I'd like to know:

Why Santa hasn't yet sold the story of his life to a book publisher?

Do OSHA inspectors ever go through his workshop?

## DICK HILKER

Does Santa get paid? If so, does he live at the North Pole to avoidincome taxes?

Does he know that people who are overweight are more likely to have heart attacks?

What does he think of war toys?

Would he consider a college fellowship to teach marketing?

Has he ever been sued by a naughty kid for defamation of character?

I'm not the only one with questions.

Susan Roberts of Arvada, who writes a column for Rocky Mountain Chefs magazine, is inquisitive, too.

She wondered how Santa is able to visit two billion households on earth in such a short time on Christmas Eve.

And, also, how does he know who's naughty and nice?

I've often puzzled over this, just like Ms. Roberts. But I'm from the Gary Hart school: The public isn't entitled to know everything about a public figure. Is it?

Well, Roberts isn't a journalist to hold back. She wanted answers.

"Today, we must have a scientific way to explain how Santa completes his rounds," she wrote. "Well, I've found it!"

She says she learned the secret from two former graduate students at the University of Chicago — students in general relativity in the university's Department of Physics.

"The key to the puzzle lies in his speed," said Gary Horowitz and Basilkio Xanthopoulos. "Santa moves almost as fast as light and everything follows from that fact."

According to their calculations, Santa spends onehalf of one-ten-thousandth of a second at each dwelling. To do this, he travels at 70,000 miles per second, which is 40 percent of the speed of light.

To determine who has been bad and good throughout the year, he flies from house to house at speeds almost as fast as light, and, according to the physicists, he "quantum-mechanically tunnels" into homes to check on us.

They also have an explanation for how Santa generates the energy to achieve this acceleration.

"The answer is that at the North Pole, Santa has a rotating, black hole. When he needs more energy, he can swing in very close to the vortex without falling in, and by a technique known to relativists as the 'Penrose Process,' leave with more energy than he had originally."

There you have it, Santa fans.

I just have two additional questions.

Does all of this have something to do with flying saucers?

And why do I still put out milk and cookies?