

Satellite mapping detects tree disease

United Press International
NEW YORK — Satellite mapping has given new meaning to the old gag about not being able to see the forest for the trees.

Scientists have discovered it's easier to detect disease in forest trees from a satellite 440 miles up in the skies than by walking among the trees on the ground.

St. Regis uses satellites to monitor two and a half million acres of forests in Florida, Georgia, Mississippi, Louisiana, Alabama and Texas. Other paper and timber companies also use aerial satellites to measure their forests and are increasingly starting to use them to monitor the condition of the trees.

Using satellites to map the shifting area of forests in wet and dry seasons has been going on for some time. NASA, the United Nations and countries along the Sahel, the fragile green belt on the southern edge of the Sahara desert in Africa, get data from a satellite that pinpoints the most stable grazing and planting areas of the Sahel as they change.

The nomadic tribes who live in that part of the world then are advised by local officials where

the best vegetation is and are moved to these areas. This prevents overgrazing and overplanting and slows the desert's relentless growth towards the Gulf of Guinea area of the Atlantic.

Satellite mapping and monitoring also is widely used for spreading flood and forest fire alarms in many parts of the world, and for making detailed maps that will serve as guides for the best use of land resources.

For St. Regis and other corporate and government users, the most difficult part of satellite mapping and monitoring projects is on the ground, training the computer to analyze properly the data the instruments in the satellite collect, said Bob Barker, manager of St. Regis's Forest Resources Information System.

If you accomplish that, you can get marvelous results, said Bud Goodrich, a St. Regis expert in image processing. He said he stuck his neck out by saying a green area on a slide projection from a satellite photo was thick pine and that it would yield 35 cords or more wood to the acre. "When we made a land inspection we found we were

right on the nose," he said.

The satellite covers the earth in a corkscrew rotation, scanning the same path once every 18 days, thus making up to 20 complete sets of photos a year, subject to cloud conditions, at a cost of fractions of a penny an acre.

The satellites already in orbit can measure energy reflections sufficiently to distinguish evergreens from hardwoods and soybeans from corn. The next group not only will detect disease in vegetation but insect infestations, not to mention remote fires that can't be detected by the eye from an airplane.

The saving in money and time in comparison with conventional ground timber surveying is astronomical, Barker said.

St. Regis said it expects satellite monitoring and mapping to provide absolute proof that the United States really is facing a major crisis of timberland depletion and must resort to a great expansion of professional management of privately owned timberlands, particularly in the southern states.

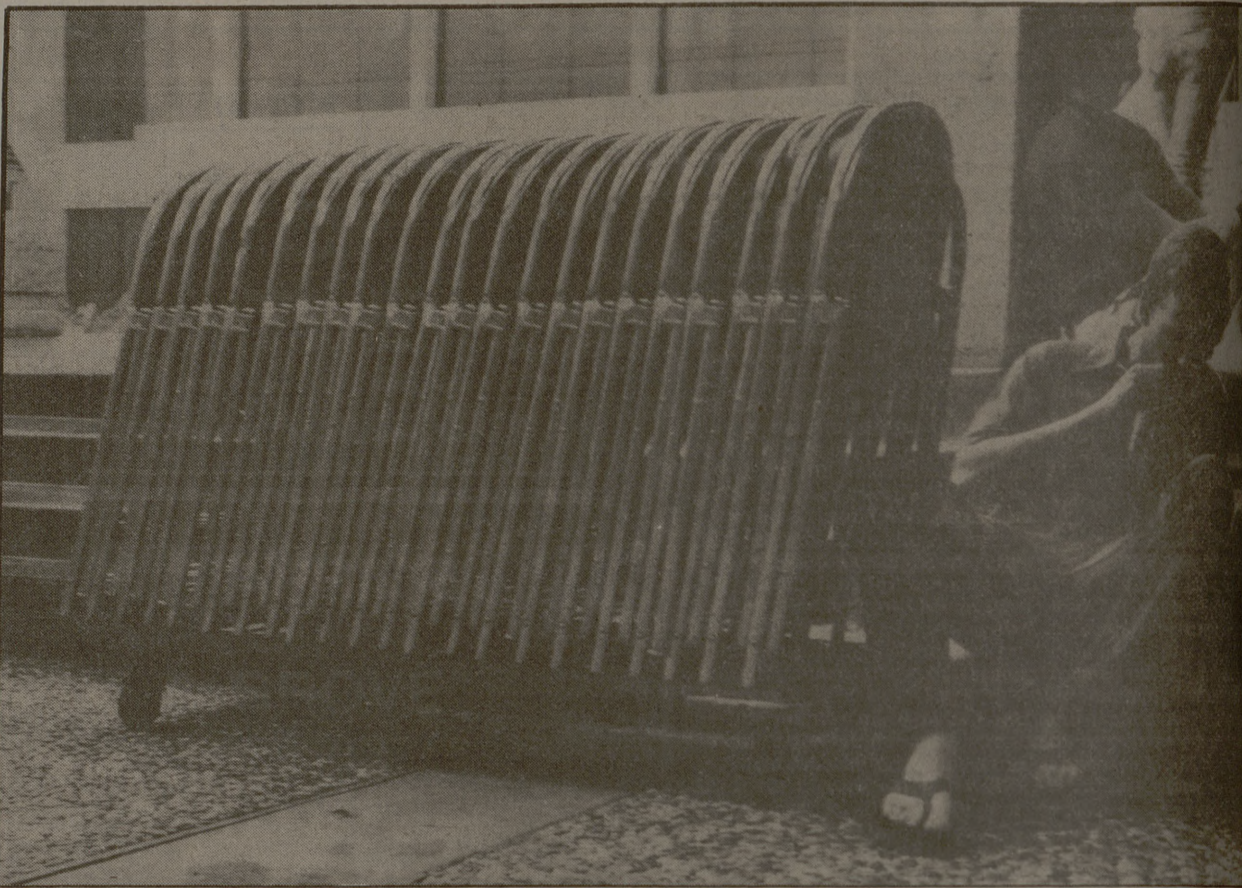


photo by Sandra La...

What are chairs for?

With a rack full of chairs, why would anyone sit on dirty ground? Gary Stone, a freshman electrical engineering major from Houston, said: "It's just more comfortable here." Stone was

sitting on the steps of the walkway between Memorial Student Center and Rudder Tower, chairs were being used for the arts and crafts in the square Thursday.

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Rabbi finds Army life busy

United Press International
FORT HOOD — What is there for a Jewish rabbi to do on

the U.S. Army's biggest post? Almost everything. Capt. Jacob Rand, the only

rabbi on the huge Central Texas post, wears two hats. Three, actually — maybe four.

He's chaplain — minister and counselor — to all denominations in the 54th Signal Battalion; spiritual leader to the Jewish community postwide; the only rabbi between Waco and Austin.

That's just the church part. Being Orthodox, Rand is also responsible for keeping kosher on the base, overseeing a Hebrew school and organizing the community's social life. As an afterthought, he's also the only rabbi in the Army qualified to perform ritual circumcision.

"The battalion commander, Lt. Col. George Bonbel, has been very helpful and understanding," he said. "Because I wear both hats — battalion chaplain and rabbi for the post — there's sometimes a need for the Jewish chaplain to come out of his corner and do his thing."

Rand, 39, has been a rabbi for 10 years and an army chaplain since October 1980.

So how did an Orthodox Rabbi find himself in the Army?

Well, Rand credits his parents for giving him an upbringing centered on religious life in Passaic, N.J. His three brothers are rabbis, his sister is a medical researcher married to an Israeli Army officer.

The military part dates back to childhood, Rand said. "My mom wanted to dress me up for a picture when I was 5 years old," Rand says. "I was dressed not as a cowboy or a rabbi, but as a soldier. Perhaps that was where I started my military interest."

After graduating from Yeshiva University, Rand returned to Passaic for four years, then on to a ministry in Massachusetts.

"While I was spiritual rabbi in New Bedford, Mass., I joined the reserves, an engineer battalion, and I found a great need for a ministry for not only Jewish people, but for people I was responsible to," he said.

"I loved my six years in the pulpit, but I have found great

reward here. I came into a commitment of three years right now I'm thinking career in the Army."

In addition to a full range of Jewish chapel services, events, cultural and ethnic studies and a Hebrew school, 30 students, Rand's position includes civilians from Fort Hood suburbs of Harker Heights and Groves, and from the near-by Belton and Temple.

For the troops, he oversees a kosher kitchen and deli.

It's a big job for one man, Rand says he gets a lot of help from the outside.

"We've received a lot of support through Jewish War Board, which is concerned with service men and women," he said. "We have a lay leader, 1st Class Steve Nadel, qualified, in case I'm unable, to be the officiating rabbi."

The military is a good environment for a rabbi, he says, given the atmosphere of tolerance traditional in the Army.

"Chaplains have to take an approach of being ecumenical," he said. "There are certain religious rites that should be performed only by chaplains of their denomination. But a chaplain must have the philosophy that there are other ways to approach God."

In fact, Rand says, his assistants are Protestant and Catholic.

"In my chapel I have Jewish people attending services, to allow them share background and share background with me. We try to share faith and allow dialogue."

But how do you reconcile requirements of religion with the often violent demands of military?

"I'm here to defend the country, not to attack another country," Rand says. "The philosophy of the United States is one of self defense."

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<p>THURSDAY EVENING SPECIAL</p> <p>Italian Candle Light Spaghetti Dinner SERVED WITH SPICED MEAT BALLS AND SAUCE Parmesan Cheese - Tossed Green Salad Choice of Salad Dressing — Hot Garlic Bread Tea or Coffee</p> <p style="font-size: small;">FOR YOUR PROTECTION OUR PERSONNEL HAVE HEALTH CARDS.</p>		
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