(NEA Telephoto)

DECORATIONS PAY OFF—Sgt. Andrew R. Allen, as the most decorated soldier aboard the troop rotation ship Marine Phoenix from Korea, was the first to debark at Seattle. As a result, he ran smack into the arms of actress Joan Caulfield, standing by for that purpose.

HST Sees Federal Farm Costs Higher in 1953

By OVID A. MARTIN

WASHINGTON (AP) — President Truman estimated Monday federal farm programs will cost seven per cent more next year because of a government need to encourage greater crop and livestock output.

His budget message to Congress outlined expenditures of slightly more than $1 ½ billion for the fiscal year beginning next July 1. This compares with an expected outlay of $1,400,000,000 for the current year, $650,000,000 last year and record of $2,800,000,000 year before last.

SUPPORTS

A major portion of the cost, he said, would be in the form of price supports, soil conservation payments, and wheat export subsidies.

Because of a shortage of critical materials, Mr. Truman recommended a smaller appropriation for rural electrification. He also forecast a reduced demand for loans financing farm purchases.

The chief executive said the government's price support program is being used to encourage farm production by keeping support prices on cotton, corn, wheat, soybeans, milk, wool and several other commodities at maximum levels of 9 per cent of parity.

(Parity is a standard for measuring farm prices, declared by law to be equally fair in relation to prices farmers pay for goods they use.)

The government's farm production goal for fiscal 1953 calls for a six per cent increase in output over last year's record and 50 per cent above the 1935-39 average. Some of this increased production would move into the department's hands as a reserve for possible future emergencies.

INCENTIVE

Mr. Truman said the 90 per cent parity support level "should help to give farmers the economic incentive necessary to maintain high production."

This appraisal of the current price support level followed statements in the President's economic report to Congress last week and his message on the State of the Union a week earlier criticizing the present farm law.

In those documents, he said a "sliding scale" provision of the current support program was likely to discourage farm production. He said many farmers fear that if they produce big crops, their prices will drop and cause them losses.

The President's budget recommendations included $256,500,000 for payments to farmers who carry out approved soil and water conservation practices. This is the same amount voted for the current year. This item faces stiff opposition from some farm groups, including the American Farm Bureau Federation, which are urging government economy.

WHEAT

He estimated $182 million will be required to pay wheat export subsidies under an international wheat agreement, or about two million more than this year and more than double the cost two years ago. He acknowledged that this program is costing more than had been forecast at the time the agreement was signed three years ago.

Mr. Truman recommended $75 million be authorized for rural telephone and electrification loans compared with $150 million provided for the current year. He said, however, that funds to be carried over from the current year would permit about as many loans as this year.

Stork Visits Ship at Sea

SEATTLE (AP) — When the Navy Transport Hugh J. Gaffey docked here Saturday, a huge flag fluttered from its side saying "IT'S A BOY."

The sign referred to Jeffrey Foegel who was born at sea last Monday. He is the son of Staff Sgt. Clinton Foegel, of Roseburg, Ore., and his Japanese wife, Kumiko.

Doctors, nurses and the medical staff delivered the baby. Carpenters built an incubator which was outfitted by electricians.

U.S. Skiers Finish One-Two

CHICAGO (AP) — U.S. Olympic team members, Art Devlin of Lake Placid, N. Y., and Wilbur Rassmussen of Ishpeming, Mich., finished 1-2 Sunday in the 46th annual Norge Ski Club jumping meet at nearby Fox River Grove.

Devlin won with leaps of 195 and 196 feet. He was awarded 220.3 points. Rassmussen compiled 216.1 and had jumps of 187 and 190 feet.

Science Measures Quakes of Jittery World

By RENNIE TAYLOR
AP Science Reporter

PASADENA, Calif. — Half an hour after the earthquake in Tibet, Aug. 15, 1950, one of the greatest ever recorded, the earth's surface in California moved slowly north-eastward about a foot, then back again.

A few minutes later, parts of New York City moved similarly, about 10 inches each way.

At intervals between these two occurrences the intervening territory moved also.

There were several of these movements about five minutes apart, lasting about half an hour. Each succeeding swing was smaller than its predecessor.

The same thing happened in other great earthquakes and will continue to happen whenever a major movement occurs in the earth's crust. A long, slow terrestrial shudder follows the earth's surface much like a wave on the ocean, but diffenent from the shock waves felt by humans. It is mostly a sliding, horizontal movement.

EARTH'S SKIN STRETCHES

The push-pull force of these quakes produces strains in a considerable area of the earth's skin, which is somewhat flexible. You can illustrate it by putting a finger on your bare arm and pushing or pulling the skin. The greatest skin movement is near the finger but there is movement also a considerable distance away, gradually decreasing.

This tremendous movement goes on all the time to some extent but does no harm because it is so big and so slow. Whole buildings, whole cities, whole mountains, even whole states move more or less at the same time. A person cannot detect it because everything around him is moving in the same direction with imperceptible slowness.

But there are two instruments now in operation here and two more on Palomar mountain, home of the "Big Eye," which can detect, measure and record this vast slow motion.

HOW GADGETS WORK

They are called strain seismographs. Conceived and designed by Dr. Hugh Benioff of the California Institute of Technology, they are being duplicated in other earthquake research centers.

The strain seismograph is based on the fact that there is a tiny difference in the amount of this movement between two points a few feet apart. But it is far too small to be detected by any ordinary means.

For example a quake in Tibet pushing its force across the Pacific compresses the earth a little while moving it slowly. The big rock upon which California Tech's seismological laboratory is built is shortened a few millionths of an inch because of this pressure.

This compresses the foundation of the building too, but a few millionths of an inch is not enough to cause damage or even draw attention. Also it stretches back into place when the wave cycle is completed.

One of Dr. Behioff's existing instruments is delicate enough, however, to detect this ultrasmall suqeezing and stretching in a 60-foot length of the rock. Given the amount of change he can quickly compute the total earth surface movement.

The instrument sits in a small-bore tunnel under the building. Its most noticeable feature is a steel tube 60 feet long. One end of this tube is set rigidly in the rock wall that closes the next end of the tunnel.

The east end of the tube is not connected to anything but it holds a gadget that converts the tiniest motion into a feeble electric current.

Half of this gadget is on the tube end. The other half is set solidly in the rock that forms the one end of the tunnel. The two halves of the gadget are only 60 thousandths of an inch apart.

When any earth force squeezes or stretches the rock it does not change the length of the tube because the gadget end of it is free. It does, however, more one half of the gadget in relation to the other half, and this motion sets up the electric current.

MOVEMENT MAGNIFIED

The current is sufficient to move a pinpoint searchlight beam. This beam is aimed at a revolving recording drum a couple of feet from the light source. A tiny movement of the light source makes a much larger movement where the pinpoint of light hits the drum. The light thus traces an enormously magnified graph of the rock squeezing or stretching movement. This graph is a series of sharp, wavy lines, a representation of the great slow motion that produced the minute squeezing and stretching.

The instrument is so sensitive that it performs wildly from the amount of strain put on the foundation rock by a person walking in the building above. Because of this the graphs are scientifically useless while building is occupied.

The weight of three men standing at one end of the instrument causes enough strain on the rock to throw the light beam far off the drum.

PALOMAR MORE TOUCHY

The Palomar instruments are even more sensitive. Here is the way Dr. Benioff illustrates their abilities:

If a giant 3000 miles tall grasped the Atlantic coast in one hand and the Pacific coast in the other and squeezed them together until he reduced the width of the continent by one inch, the tube of a strain seismograph set somewhere near Omaha would move about five millionths of an inch and would swing its light beam nearly half an inch.

These great slow motions have wave lengths far too long for ordinary earth movement detectors. They are about 620 miles from peak to peak in cycles of about five minutes each, which means a speed upwards of 120 miles a minute.

Earthquake waves which travel more or less directly through the earth instead of along its surface are the principal ones recorded on ordinary seismographs. They are much shorter than the strain waves. These direct waves have frequencies ranging from a few seconds up to 50 seconds. Thus an ordinary seismograph is as useless on these long, slow strain movements as a short wave radio receiver trying to pick up a long wave broadcast.

GIANT CALLED FOR

Any living thing big enough to feel the long waves would need a reach of at least 300 miles. Benioff's giant, standing with one foot in Kansas City and the other in Cincinnati, might feel them slightly.

There may be other waves even longer than the five-minute ones, possibly with frequencies of hours or days. They may be writing the pattern of growth of mountains or even changes in whole continents.

So important are these great waves that the government is taking a hand in the research. Dr. Benioff's project is supported by the geophysical section of the U.S. air force laboratories at Cambridge, Mass.

The new instrumentson Palomar Mountain have tubes 150 feet long. They will be able to pick up waves longer than those recorded on the 60-foot instruments here, but just how much longer Dr. Benioff does not know yet.

K.U.H.S. Highlights

By JEAN OWENS

Pelican quintet met a surprise upset in the Klamath vs. Grants Pass basketball game on the Grants Pass home court Friday night, but they came through with the high score in Saturday night's game to redeem themselves and their school.

Many Pel fans braved the icy highways to see and support the team Saturday night, although only a few were able to attend Friday night.

Congratulations to the Pels for well-played but hard-fought games.

Sunday "Youth Views the News," at six thirty over KFJI had many listeners in the Klamath Basin due to the participation of KUHS students. It was heard over four stations in Oregon and eight stations in Washington.

The program was tape-recorded Friday morning at 10:20 by station KOMO, Seattle, with Millard Ireland as moderator and Bob Hurd as producer.

Four students made up the panel which discussed three subjects: phases of President Truman's state of the union address to Congress, Korean peace negotiations and the International Boxing club. Panel members were Trudy Bramlett, Beverly Eells, Tom Murdock and LeRoy Porter.

"Student co-operation in the program was especially fine," was the comment of Millard Ireland. All arrangements were made by Mr. Deller, civics teacher and advisor to the IRL, and the program was sponsored by Weyerhauser Timber company.

Pelican service club has formed a disciplinary committee to enforce the rules and regulations of the club.

Members of the committee are the three officers of the club, Advisor Mr. Ross, Claudia Miller, June Stearn, Don Paugh and Forrest Rutledge.

As we ourselves are the teenagers, perhaps the panel discussion tonight at 8:30 over KFLW, "how we can better build tomorrow's citizens," should be of special interest to all of us. Because of the great amount of public response this is a continuation of last weeks discussion on the same topic.

Listen in to hear the opinions of others, then form your own.

Mix diced pears with diced celery and broken walnut meats and mold in a flavored gelatin; serve on salad greens with a cream cheese dressing.

Temp Plunges In Fairbanks

FAIRBANKS, Alaska (AP) — The temperature skidded to 60 degrees below zero Sunday and Fairbanks' 20,000 residents, their regular air communication virtually cut off by the bitter cold, shivered in a frosty world of their own.

The cold spell, the second in ten days, held most of the far north in its grip.

It was 78 below zero at Snag on the Alaska-Canadian border and many Interior Alaska points reported readings of 70 below or colder.

A dense ice fog which always forms when the mercury drops below minus 45, forced scheduled airlines to cancel flights to and from Fairbanks.

Because of the difficulty of starting cold engines, drivers were keeping their motors running 24 hours a day.

The hardy who ventured outdoors were bundled in fur - lined parkas with wool mufflers tied over their faces to keep noses and cheek from freezing. An uncovered cheek would freeze in as little as ten minutes of exposure.

Deliverymen for grocery stores were the busiest people in town. They had to race around their routes, delivering two or three orders at a time to prevent the food from freezing.

If they tarried with a load of groceries, they would have apples as hard as rocks, eggs that smashed like glass and canned goods that had frozen and bulged the container.

Cans of beer froze in less than 45 minutes.

One dairy installed a battery of heaters in its delivery trucks so milk could be delivered to customers before it turned to ice cream.

WINNERS

NEWBERG (AP) — Lorene Christianson, Linfield College, and Tom Schedill, Willamette University, won top honors in the women's and men's divisions of the state after dinner speaking contest at George Fox College Friday.

The Intercollegiate Forensic Association of Oregon sponsored the contest.