

Mobile Unit Designed to Forecast at Fire Sites

The part weather plays in helping to fight forest fires is important.

Important enough, in fact, that the weather bureau has added to its staff in Medford a fire weather meteorologist, and has provided a new mobile fire weather forecast unit, one of 13 recently purchased by the weather bureau for use in the western part of the country.

An example of weather and its effect upon forest fires was demonstrated recently in the Applegate fire off the Jacksonville highway, when unexpected gusty winds spoiled a controlled blaze across fire lines and whipped it out of control.

In the same blaze, a fire fighting crew was endangered when the wind shifted without warning, almost trapping the crew. Tools used by the crew were dropped, and the men had to run to avoid the approaching fire.

The new mobile fire weather unit stationed at Medford is designed to help forecast what will happen at the site of a forest fire, especially as far as wind behavior is concerned, according to Jim Tyrrell, fire weather forecaster.

The forecasting system may not be ideal and predict exactly what will happen, but it will a long way in forecasting unusual conditions, and will prove invaluable from the "wild" fire standpoint.

Forest protection agencies have for some time recognized the need for "spot" forecasting, and the fire weather mobile unit is designed for that.

The mobile unit is housed in a three-quarter ton pickup truck with an especially designed camper.

It has a two-way single side band radio for which two frequencies have been designated, one for voice and the other for data transmission. Such data would include weather charts sent from the regular forecast office.

The unit has a portable power supply, plus equipment for taking regular observations and upper wind observations at the scene of large fires.

The unit stationed in Medford will be used primarily in the Medford fire weather district. This includes Siskiyou, Rogue, Fremont, and Winema National forests, Crater Lake National park, Klamath and Curry county forest protective associations, and the southwest district of the state department of forestry.



Jim Tyrrell, fire weather meteorologist at the Medford weather bureau station, explains the new mobile fire forecast unit to Doug Finch, dispatcher for the Rogue River National forest, and Wayne Peterson, administrative assistant for the southwest Oregon district of the Oregon state department of forestry. The unit is one of 13 distributed throughout the western states to fire weather offices, and is especially designed for on-the-spot forecasting at the scene of large fires.

Increases Noted in Millage Rates for Seven Area Cities

By EARL H. ADAMS
Mail Tribune City Editor

The combined tax millage rates in seven Jackson county cities and towns increased this fiscal year over last year, according to the county assessor's office. Rates in three cities decreased.

The millage rate, translated into dollar value, is the amount property owners are taxed per hundred dollars of valuation. The money goes to the taxing units in which the property is located.

The increases ranged from 3.7 mills in Jacksonville to 37 mills in Eagle Point. Decreases were 9.6 mills in Phoenix, 1.8 mills in Ashland and 3.4 mills in Talent.

The increase in Eagle Point is because of a 20.7 mill rise in the levy for the city of Eagle Point, which is now repaying bonds sold to finance a sewer system, and a 16.3 mill rise in the Eagle Point school district levy.

The following table gives the 1962-63 millage rates in cities, the school district serving that city, the total levy and the levy increase or decrease. The city and school district levies are in parentheses.

City	School District	Total Levy	Increase or Decrease (+ or -)
Jacksonville (28.4)	549 (60.7)	89.1	+3.7
Phoenix (22.2)	4 (56.2)	78.4	-9.6
Ashland (20.9)	5 (64.9)	85.8	-1.8
Gold Hill (23.0)	6C (60.9)	83.9	+5.2
Central Point (22.4)	6C (60.9)	83.3	+8.4
Eagle Point (42.1)	9 (72.9)	115.0	+37.0
Talent (26.6)	4 (58.5)	85.1	-3.4
Rogue River (27.3)	35 (61.3)	88.6	+3.8
Medford (32.6)	549 (60.7)	93.3	+7.6
Butte Falls (21.0)	91 (74.0)	95.0	+5.5

The difference in millage rates in school district 4, which includes both Phoenix and Talent, is because of the recent consolidation of the two districts. Property owners in the old Talent school district have bond issue obligations which were not assumed by the Phoenix district when the two consolidated.

Property owners may figure their property tax by converting the total levy in mills to a dollar valuation. For example, residents of Eagle Point, where the total levy is 115 mills, will pay a total of \$11.50 per \$100 of assessed valuation.

Eagle Point's millage increase is divided between the city and school district levies. The city levy increased 20.7 mills this year to a total of 42.1 mills, and the school district's levy increased 16.3 mills to a total of 72.9.

The following table shows the increase or decrease in the levies in cities and towns in Jackson county. It gives the 1962-63 city budget, the increase in the budget this year, and the increase or decrease in the levy. The total city levy is listed in parentheses in the table above.

City	Budget	Levy Increase Budget or Decrease (+ or -)
Jacksonville	\$ 19,022.43	\$ 2,091.34 +2.2
Phoenix	\$ 19,482.83	\$ 594.05 -6.1
Ashland	\$ 173,469.39	\$ 7,330.87 +0.3
Gold Hill	\$ 12,024.68	\$ 1,637.81 +2.0
Central Point	\$ 54,245.88	\$ 15,137.14 +5.2
Eagle Point	\$ 15,874.39	\$ 7,494.07 +20.7
Talent	\$ 14,436.14	\$ 734.89 -0.2
Rogue River	\$ 13,376.82	\$ 1,355.92 +0.8
Medford	\$ 171,857.96	\$ 347,270.77 +6.1
Butte Falls	\$ 2,811.98	\$ 63.06 +0.5

Although all city budgets show an increase, some levies show a decrease. This is because of increases in income from sources other than taxation.

Property owners outside incorporated cities and towns will have varying millage rates, depending upon the taxing districts in which they live. Taxing units in Jackson county, in addition to school districts and cities, are rural fire protection, water, sanitary and other special assessment districts.

There is no tax levy for county government, because of other income, principally from O&G receipts.

Some property owners live in one taxing district, in addition to the school district, and others may live or own property in two or more special taxing districts.

School district levies account for the largest share of the property tax levy. This tax levy is shown in the following table, which lists the school district, the total amount to be raised through property taxes, the increase or decrease of the tax over last year, the millage levy increase or decrease, and the millage levied for the 1962-63 fiscal year.

School District	Total Tax	Tax Increase Or Decrease (+ or -)	Levy Increase Or Decrease (+ or -)	Total Levy
Phoenix (original)	\$ 446,030.78	+\$ 60,182.96	-3.5	56.2
Phoenix (consolidated)	\$ 114,383.59	+\$ 12,912.00	-3.2	58.5
Ashland	\$ 811,591.13	-\$ 19,302.87	-2.1	64.9
Cent. Point	\$ 726,251.01	+\$ 73,971.16	+3.2	60.9
Eagle Point	\$ 656,022.29	+\$ 139,051.86	+16.3	72.9
Rogue River	\$ 163,964.68	+\$ 37,600.59	+3.0	61.3
Applegate	\$ 58,668.26	+\$ 26,608.00	+37.4	85.3
Medford	\$ 3,134,328.68	+\$ 236,059.20	+1.5	60.7
Prospect	\$ 133,819.60	+\$ 7,948.49	+4.2	78.0
Evans Valley	\$ 85,792.83	+\$ 10,153.66	+14.6	70.9
Butte Falls	\$ 115,484.70	+\$ 13,737.44	+5.0	74.0
Pinchurst	\$ 34,546.38	+\$ 5,365.82	+17.7	52.4

The total school levy actually is three different levies—the rural school, special school and school bond levies. The rural school levy is the same in all districts, 26.2 mills, but the special school and school bond levies vary from district to district.

The special school levies are: Phoenix (both original and consolidated district), 24.2; Ashland, 28.4; Central Point, 27.4; Eagle Point, 37.3; Rogue River, 25.8; Applegate, 58.5; Medford, 29.4; Prospect, 43.1; Evans Valley, 40.7; Butte Falls, 41.2; and Pinchurst, 26.2.

The school bond levy is the amount raised through taxation for general operating expenditures in the districts. The school bond levy is the amount raised through property taxes for repayment of bonds issued for capital improvements.

The school bond levies are: Phoenix (original), 5.8; Phoenix (consolidated), 8.1; Ashland, 10.3; Central Point, 7.3; Eagle Point, 9.4; Rogue River, 9.3; Applegate, 0.6; Medford, 5.1; Prospect, 8.7; Evans Valley, 4.0; and Butte Falls, 6.6.

Pinchurst school district has no school bond levy since it has no bonded indebtedness.

Most of the increases in school budgets are because of rises in operating and instructional expenses.

In cases where the amount raised by taxes increases, but the millage levy decreases, other revenues have increased to a point high enough to reduce the levy. A reverse condition exists when the amount to be raised decreases, but the millage levy increases, as in the case of Butte Falls school district.

Weather Bureau Makes No Claim To Be Infallible

By HARRY FERGUSON
United Press International

Washington — (UPI) — Next to a baseball umpire, the weather man gets more second guessing than anybody. The difference is that the U.S. Weather Bureau makes no claim to being infallible and, in fact, spends most of its time revising its previous judgments.

The Jones family decides to spend Saturday driving 40 miles to a beach and having a picnic. At 7 a.m. they check on the weather by looking at the morning papers or turning on the television or radio.

It doesn't make any difference where they get their information because it all comes from the same source—the U.S. Weather Bureau. They read or hear this:

"Mostly sunny today with a high temperature of 82 degrees. Fair and cooler tonight."

Odds Favor Forecast

The odds are almost seven to one that the Jones family will find things exactly as forecast. But there always is that one chance that it will start raining as soon as they hit the road and continue all day. The heaviest cross the Weather Bureau has to bear is that when a forecast is correct people take it for granted, but when it is wrong they never forget it.

Over the years the Weather Bureau has a record of making correct forecasts 87 per cent of the time. When they go astray, it is primarily because of a factor which they call "insufficient sampling."

There are 300 full time weather bureaus operating 24 hours a day and about 12,000 volunteer helpers. But it is still impossible to have a weather observer in every town in the country, and here is how the mistakes come about:

Issues Prediction

At 4 a.m. the forecaster in Richmond, Va., issues his prediction for three periods—7 a.m. to 7 p.m., then for the night hours and then for the following day. Richmond is roughly 100 miles from Washington and the Richmond man has the benefit of observations made in the Nation's capital as well as his own. On the basis of that he predicts fair and warm. But half way between Washington and Richmond, in the town



Next to a baseball umpire, the weather man gets more second guessing than anybody. The difference is that the U.S. weather bureau makes no claim to being infallible and, in fact, spends most of its time revising its previous judgments. Probably quite willing to help with the revisions are stranded motorists like these, who were stalled in a seven-inch snowfall on Grand Central parkway Dec. 22, 1959, or who were victims of autos overheating in sweltering 99-degree temperature in New Jersey en route to the Lincoln tunnel June 29, 1959. (UPI)

of Fredericksburg, Va., something is happening that the forecaster doesn't know about. Nobody is there to report it for him.

At 7:30 a.m. it starts to rain in Richmond because of conditions over Fredericksburg and many a man looks out the window, throws his newspaper on the floor and advises his wife that the weather man is a bum.

Or perhaps—and this is where the weather bureau gets a break—he denounces the newspaper or the TV-radio station. A sizeable segment of the American population apparently is convinced that newspapers and TV-radio stations personally go through some mysterious mumbo-jumbo in an attempt to predict the weather.

Unlike baseball umpires, the Weather Bureau has no hesitancy in reversing itself and the forecast is updated at least four times a day.

Tricky Business

Any scientist will tell you that predicting the weather is tricky business, but there are millions of Americans who will remain convinced until the day they die that they can do a better job than the Weather Bureau.

They depend on such things as the way moss grows on trees, whether a groundhog comes out of his hole and which way cattle face in a pasture. Then there is the undying legend about the Eskimo being an infallible weather prophet because when he builds an extra thick igloo it is going to be a tough winter.

Weather men have a story about that:

White man: "I see you are building a thick igloo. Is it going to be an extra severe winter?"

Eskimo: "Don't know."

White man: "Then why are you building such a thick igloo?"

Eskimo: "Eskimo build thick igloo because he saw white man laying in double supply of coal."

Bureau Is Skeptical

The Weather Bureau is skeptical of any specific forecast for any specific locality that is made more than 48 hours in advance. It does go in for long-range studies, but only in the most general terms.

Such studies are valuable

to farmers and especially to fruit growers who are extremely sensitive about weather forecasts. An unexpected drop of one or two degrees below frost conditions can be a disaster.

Will man ever be able to do anything to the weather except talk about it? Scientists are cautious about weather modification and the National Science Foundation submitted a report to President Kennedy pointing out that too much tinkering might produce worse weather rather than better.

One Theory Held

One theory held by reputable meteorologists is that it might be possible to bomb hurricanes with TNT and at least diminish their strength. A hundred pounds of dry ice was dropped on Hurricane Esther last year and part of the storm's eye wall was rained out. But it reformed quickly and Esther never lost her drive. Bombing a hurricane with a megaton (a million tons of TNT) of nuclear power could cost about \$1 million and the Weather Bureau doesn't have the money to spend that way. There also might be a fall-out problem.

Seeding clouds to cause rain succeeds fairly well in mountainous areas during cold weather. It's not so good where it is needed most—in the arid plains.

Wages Ceaseless War

The Weather Bureau wages ceaseless war against hurricanes and tornadoes by constantly trying to improve its warning system. It has been using airplanes to explore hurricanes.

In the many queries received by the Weather Bureau there occasionally is an inquiry as to how a person can become a long-range weather forecaster without bothering to study meteorology. The answer usually given is this:

"Get the figures on the temperature and rainfall for your locality for the last 20 years. For every day it rained write 'rain' on a slip of paper and put it in your hat. Do the same for every day that was cloudy or clear. When you get ready to make your forecast, start drawing slips out of the hat. If you don't like the result, put the slips back in the hat and draw again."