

# Executive Department

# **EMERGENCY SERVICES DIVISION**

43 CAPITOL BUILDING, SALEM, OREGON 97310 PHONE 378-4124

MAY 1 9 1980

Governor Atiyeh

MT. ST. HELENS REPORT

MAY 19, 1980

THE EMERGENCY SERVICES DIVISION STAFF IS ON STANDY-BY
AS ARE THE OTHER MAJOR STATE AGENCIES. STAFF HAS BEEN BRIEFED
AS TO SITUATION.

IN WATCHING THE STATE OF WASHINGTON ACTIVITY THE MAJOR AREAS OF CONCERN WOULD BE TRAFFIC CONTROL, POSSIBLE WATER PROBLEMS, PEOPLE WITH RESPIRATORY PROBLEMS AND OBVIOUSLY, POLLUTION.

REPORTS TAKEN FROM AGENCIES ARE AS FOLLOWS:

#### OREGON STATE POLICE - SUPERINTENDENT WILLIAMS:

PERSONNEL FROM ASTORIA TO BAKER HAVE BEEN INSTRUCTED TO OBTAIN SURGICAL TYPE MASKS, ALSO TO MAKE SURE THEY ARE EQUIPPED WITH GAS MASKS - AT PRESENT THEY ARE INTELLIGENCE GATHERING AND WORKING CLOSELY WITH WASHINGTON STATE PATROL. THEY HAVE RELIEVED THE WASHINGTON STATE PATROL OF TRAFFIC CONTROL ON THE INTERSTATE BRIDGE AT VANCOUVER. THEY HAVE ALERTED ALL STATIONS TO REPORT ANY FINDINGS OF FALLOUT.

#### STATE HEALTH DIVISION - DR. BADER:

THEIR TWO CONCERNS ARE AIR AND WATER. THEY WILL FOLLOW NORMAL AIR QUALITY STANDARDS AND WARNINGS. THEY STATE WATER IS NOT TOO GREAT A PROBLEM AS WATER DISTRICTS CAN ADD CHEMICALS TO SUPPLIES AND REDUCE ACIDITY. REPORTS FROM EASTERN WASHINGTON DO NOT SHOW AN INCREASE IN RESPIRATORY PROBLEMS REPORTED TO HOSPITALS. PEOPLE WILL BE ENCOURAGED TO STAY INDOORS AND PEOPLE WITH BREATHING PROBLEMS WILL BE ASKED TO EVACUATE.

### HIGHWAY DIVISION - L.W. RULIEN:

THEY ARE IN CONTACT WITH WASHINGTON HIGHWAY DEPARTMENT.

AT THE PRESENT, THEY INTEND TO USE STATE OF WASHINGTON'S

TECHNIQUES IN REMOVAL. THEY ARE PREPARED TO CLOSE AND/OR SIGN

ROADS AND CLEAR THE ASH AS SOON AS POSSIBLE. THEY ARE WORKING

ON A LIST OF "DO'S" AND "DON'TS" BASED ON ACTIONS IN YAKIMA.

## DEQ - DR. WARREN WESTGARTH:

WILL MONITOR FOR AIR QUALITY AND ISSUE ADVISORIES AS NECESSARY, MONITOR STREAMS AND WATER SUPPLIES ALONG WITH EPA, MONITOR SEWAGE TREATMENT PLANTS AND RECOMMEND POSSIBLE SHUTDOWN, ISSUE INFORMATION ON PROTECTION OF LIVESTOCK AND FOOD SUPPLIES AND WORK TO PROTECT ALL WATER SUPPLIES.

#### NATIONAL WEATHER SERVICE - JIM WAKEFIELD - 3:30 P.M.:

THE VOLCANIC ACTIVITY HAS SUBSIDED TODAY AND WHILE SMOKE IS VISIBLE FROM THE PORTLAND AREA, THE ASH FROM THE MOUNTAIN IS NOT HEAVY ENOUGH TO BE DETECTED ON PORTLAND RADAR. YESTERDAY THE PORTLAND RADAR SHOWED PLUMES TO 50,000 FEET AT 9:00 A.M. AND TO 63,000 FEET JUST BEFORE 5:00 P.M. (5-18) A LIGHT ASH WHICH HAS BEEN DESCRIBED TO ME AS MUCH LIKE FOG, HAS FALLEN IN THE AREA NEAR YAKIMA TODAY BUT ONLY ABOUT HALF-INCH IS REPORTED AT THE YAKIMA AIRPORT.

SURFACE WINDS OF 10-15 MPH ARE STIRRING UP THE ASH IN MANY AREAS OF EASTERN WASHINGTON HOWEVER, THIS ASH IS NOT COMING DIRECTLY FROM THE MOUNTAIN.

THE WINDS ALOFT FROM 10-18 THOUSAND FEET ARE GENERALLY
WEST TO SOUTHWEST AT PRESENT. WINDS AT HIGHER ELEVATIONS ARE
WESTERLY. WINDS AT ALL UPPER LEVELS WILL BECOME A LITTLE MORE
SOUTHWEST BY TUESDAY. THIS MEANS THAT ANY FALLOUT FROM MOUNT
ST. HELENS WILL NOT REACH AREAS IN OREGON ON TUESDAY AND
PROBABLY NOT THROUGH THE REMAINDER OF THE WEEK. GENERALY WEATHER
PATTERN FOR OREGON IS FOR SOME INCREASE IN CLOUDINESS WITH A THREAT
OF RAIN ON THE COAST AND NORTH INTERIOR BY WEDNESDAY.

#### STATE OF WASHINGTON EMERGENCY SERVICES - 3:15 P.M.:

THEY ARE FINDING THAT THE FURTHER AWAY FROM THE MOUNTAIN THE MORE ACIDIC THE ASH. THE MOUNTAIN IS GENERATING WHAT THEY CALL "PUFFS" CARRYING ADDITIONAL DEBRIS INTO THE ATMOSPHERE. IN ADDITION TO THE NEW VENT NEXT TO HIGHWAY #504, THERE IS ANOTHER NEW VENT APPROXIMATELY 10 MILES N.E. OF THE MOUNTAIN. (NORTH OF SPIRIT LAKE). IT IS TRUE THAT SPIRIT LAKE HAS ALL BUT DISAPPEARED - FILLED WITH GARBAGE AND DEBRIS. THERE ARE NO DOLLAR FIGURES AVAILABLE YET, HOWEVER THEY ARE BEGINNING TO GET AN IDEA OF THE DEVASTATION IN EASTERN WASHINGTON. HAVE FOUND IT IS NOT A GOOD IDEA TO WASH THE ASH DOWN WITH WATER AS IT BECOMES A THICK AND GOOEY MESS.

OFFICIAL REQUEST RECEIVED FROM THE STATE OF WASHINGTON EMERGENCY SERVICES, FOR TWO DREGON EMERGENCY SERVICES STAFF TO ASSIST THEM AT THE STATE EOC IN DLYMPIA.

0008 03/15/82 1948 0276 CCD JROCCDF00 03/15/82 1946 APB JREGJN ØR EMERGENCY SERVICE MAR 16 1982 Governor Atiyeh

MT. ST. HELENS ADVISORY

ACCELERATING RATES OF GRJUND DEFORMATION IN THE CRATER, JF AT. ST. HELENS SUGGESTS THAT AN ERUPTION MOST LIKELY OF THE DOME BUILDING TYPE WILL PROBABLY BEGIN IN ONE TO FIVE DAYS. DEEP EARTH QUAKES HAVE ALADST CEASED AND SHALLOW EARTHQUAKES CONTINUE AT A MODERATE RATE. A FURTHER INCREASE IN SHALLOW SEISMICITY IS LIKELY BEFORE THE ERUPTION STARTS.

THE RESTRICTED ZONE AROUND MT. ST. HELENS IS OPEN.

INFORMATION FROM U.S. GEOLOGICAL SURVEY, VANCOUVER, WASHINGTON AND UNIVERSITY OF WASHINGTON GEOPHYSICS, SEATTLE, WASHINGTON

ABBY KERSHAW ØREGØN EMERGENCY MANAGEMENT SALEM, ØREGØN GJS

JUN 1 2 1981

Governor Atiyeh

Mt. St. Helens Extended Outlook Advisory.

Issued at 1:00 P.M., 6-12-81. USGS/U of W.

Rates of ground deformation in the crater of Mt. St. Helens have increased during the past three weeks.

Sulfur Dioxide gas emissions have also increased over the same period of time.

Similar changes have occurred in advance of previous dome building eruptions.

If current trends continue; an eruption, probably of the dome building type, will begin within the next week or two.

In the meantime: Highly visible steam and ash bursts, similar to those of the past weeks, are likely to continue.

Seismicity remains low. Based on previous experience, seismicity can be expected to increase at least a day or two before a new eruption.

This Advisory will be followed by more specific advisories, if and when seismicity shows a clear increase.

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DE WASH 034 [46]643 R 1919[0Z MAY B0 FM DES WASH TO FEMA REG TEN REG TEN CO STATE DIRECTORS

ENGL AS

SUBJ: WT. ST. HELEMS UPDATE
ACTIVITY CONTINUES THIS MORNING, WITH CONTINUOUS PULSING AND
ERUPTION FROM THE CRATER BETWEEN CSOS-8900, THE CRATER NOW.
APPEARS TO BE HORSESHOE SHAPED, WITH THE NORTH SIDE OF THE
MOUNTAIN GOME. ASH CLOUD REACHING 12,300 FEET - WATER IN
TOUTLE RIVER APPEARS TO BE STEAMING. SPIRIT LAKE HAS APPARENTLY
CEASED TO EXIST. NO SIGNIFICANT RISE HAS BEEN NOTED IN SWIFT
RESERVOIR AND THE DAM APPEARS STABLE.

SEARCHES CONTINUE FOR MISSING PERSONS IN THE AREA. LATEST REPORTS INDICATE 5 PERSONS DEAD AND 29 MISSING. 5 PERSONS HAVE REPORTEDLY BEEN RESCHED THIS MORNING. MISSING PERSON REPORTS CONTINUE TO HE RECEIVED. AMERICAN PEO OROSS REPORTS 1876 PERSONS NOW IN SHELTERS STATEWIDE. MANY BEING STRANDED MOTORISTS. NUMEROUS HIGHWAYS AND AIRPORTS CONTINUE TO BE CLOSED DUE TO LIMITED VISIBILITY AND HAZARDONS CONDITIONS. I-5 WASH OPENED AT 8712 AND REMAINS DREN.

DEPT. OF ECOLOGY PEPORTS THAT ASH CAN BE WASHED FROM VEHICLES WITH WATER.

THERE APPEARS TO BE NO SIGNIFICANT INCHEASE IN THE ACIDITY LEVELS OF WATER DUE TO ASH FALL.

FURTHER UPDATES WILL BE ISSUED AS INFORMATION BECOMES AVA

SIGNED/EDWARD CHOW, JR., DIRECTOR

AM . CCD . APB .

PLEASE PASS TØ EMERGENCY SERVICES DIRECTØRS/COURDINATORS

WASHINGTON STATE EMERGENCY SERVICES HAS ADVISED THIS AGENCY THAT THE USGS HAS RECOMMENDED EVACUATION OF THE RED ZONE AROUND MT ST HELENS DUE TO HARMONIC TREMORS UNDER THE MOUNTAIN.

IN THE EVENT OF AN ERUPTION, ASH FALL PLUME TRAJECTORY IS GENERALLY TO THE EAST AT HIGH ELEVATIONS. WINDS AT LOW ELEVATIONS (6,000 TO 12,000 FEET) ARE TO THE SOUTH AT 5 TO 10 MILES PER HOUR.

SIGNED: HARVEY L. LATHAM/ADMIN, ØR ESD: JH 0004 CCD ØROCCDF00 08/07/80 1416 APB ØREGØN NATIONAL WEATHER SERVICE FORECAST OFFICE PORTLAND OR 555 PM PDT TUE JUL 22 1980

MT ST HELENS RADAR UPDATE ...

WEATHER SERVICE RADAR AT PORTLAND AS OF 555 PM PDT NOTES ONLY STEAM EMITTING FROM MT ST HELENS WITH TOPS UNDER 12000 FEET. THE ORIGINAL PLUMING TO 45000 AT ABOUT 520 PM HAS MOVED TOWARD THE NORTHEAST.

FURTHER UPDATES WILL BE ISSUED AS CONDITIONS WARRANT.

END

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REG TEN STATE CD DIRECTORS
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US GEOLOGICAL SURVEY AND UNIVERSITY OF WASHINGTIN
VANCOUVER AND SEATTLE, WASHINGTON

VOLCANIC AND SEISMIC ACTIVITY AT MT ST HELENS REPORT AT 0900. WEDNESDAY MAY 21. 1980

ERUPTIVE AND SEISMIC ACTIVITY HAVE CONTINUED TO DECLINE AT HELENS, FOLLOWING THE TREND REPORTED YESTERDAY MOUNT ST. ERUPTIVE ACTIVITY AT THE CRATER VENT IS NOW SPORADIC. MORNING. AND MUCH OF THE EMISSION APPEARS TO BE CONDENSED STEAM. APPEARS THAT THE DEBRIS FLOW THAT RUSHED DOWN THE DRAINAGE OF THE NORTH TOUTLE RIVER ON SUNDAY MORNING, IMMEDIATELY AFTER THE INITIAL NORTHWARD-DIRECTED BLAST. WAS RELATIVELY COOL. PROBABLY REPRESENTS THE REMNANT OF THE VOLCANO'S NORTH FLANK THAT DISAPPEARED AFTER THE BLAST; THE SPORADIC WARM AREAS IN IT PROBABLY REPRESENT WARMER PARTS OF THE VOLCANO'S INTERIOR THIS DEBRIS-FLOW DEPOSIT ALSO CONTAINS BEFORE ITS DISRUPTION. BLOCKS OF ICE FROM THE NORTH-FLANK GLACIERS THAT DISAPPEARED WITH THAT PART OF THE VOLCANO; SOME OF THE BLOCKS HAVE MELTED IN PLACE AND LEAVE HOLES IN THE BUMMOCKY SURFACT OF THE DEBRIS-FLOW.

TEMPERATURES WERE MEASURED IN SECONDARY PYROCLASTIC FLOWS
THAT FORMED FROM THE ASH OF THE INITIAL BLAST DEPOSIT AND ARE
NOW AS HIGH AS 147 DEGREES C - AT DEPTHS OF ABOUT 2 FFET. THE LARGE
FUMAROLES AND SECONDARY-EXPLOSIONS THAT HAVE DISRUPTED THE
DEBRIS FLOW AND YOUNGER PUMICEOUS PYROCLASTIC FLOWS IN THE
UPPER DRAINAGE OF THE NORTH TOUTLE RIVER MAY HAVE THEIR HEAT
SOURCE IN THE HOT ASH OF THE INITIAL BLAST DEPOSIT.

SEISMICITY HAS DECLINED DRAMATICALLY AND IS LOWER THAN AT ANY TIME SINCE MARCH 22. THERE HAVE BEEN NO EARTHQUAKES OF MAGNITUDES GREATER THAN 3 SINCE 0722 ON MONDAY MORNING. ALL OF THE EARTHQUAKES OF MAGNITUDES GREATER THAN 1.5 ARE NOW OCCURRING FROM DEPTHS GREATER THAN 10 KM.

THE PRINCIPAL IMMEDIATE HAZARD POTENTIAL REMAINS THE POSSIBLE OVERFLOW OF SPIRIT LAKE, WHICH COULD CAUSE FURTHER MUDFLOWS AND FLOODING THE VALLEY OF THE NORTH TOUTLE. THE BEST DATA AVAILABLE FROM OBSERVATIONS AND FROM RADAR IMAGERY, ALTHOUGH THEY ARE INCOMPLETE, DO NOT SUGGEST THAT THE LAKE LEVEL IS RISING RAPIDLY. SIGNED/ED CHOW, DIRECTOR BT



# STATE OF OREGON

### INTEROFFICE MEMO

MAY 2 1 1980

Governor Atiyeh

DATE:

May 21, 1980

FROM:

TO:

Michaela McIntosh

Glenna Hayden

SUBJECT:

Presidential visit.

Col. Connell called concerning the President's visit; best information he has is that they will arrive at about 6:00 p.m. this evening. Travelling with the President will be the Secretary of the Army, General Alexander and the Deputy Director of the Corps of Engineers for Civil Works, General Heiberg. - SEC. BERGLUND /ANDRUS

Purpose of the visit is to review the emergency situation in the Columbia River. The 304 Aviation squadron is handling the logistics of the visit and the President will be staying in the Marriott in Portland.

Please contact the Colonel to confirm whether the Governor plans to meet with him. His FTS number is 423-6000 and regular is 221-6000.

He asked who was coordinating this on our end and I just said that you were responsible for all the Governor's scheduling and that you would call him.

CHNTHIA WICKS-SMITH (202) 456-2335 1 JUST Agency . F.E.M.A. (Bot Stevens)





# STATE OF OREGON

Columbia River

# INTEROFFICE MEMO

TO:

Governor

DATE: Wed., May 21

FROM:

Col. Connell,

Corp. of Engineers 221-6000

SUBJECT:

MAY 2 1 1980

Governor Atiyeh

A sum of \$15 million in emergency monies has been requested to provide for dredging in the Columbia River.

There was one dredge working yesterday, another starting this afternoon and will start tomorrow (Harding from CAlif.) Port of Portland dredge (Oregon) will be moving up and working within a matter of days. Private enterprise will be given opportunity for competitive bids for three or more large pipe line dredges (24" or greater). It is anticipated they will be on duty within a week. They are located in the Seattle area and perhaps California.

Several phases are planned. The first one is to have the chanel opened 25X200 wide by week from tomorrow - May 29. This will allow lightly loaded or empty vessels to pass with assistance from Coast Guard or pilots.

Within two weeks will widen chanel to 300 ft wide and 30 ft deep. In six, eight or ten weeks chanel should be back to normal operation but not have full width.

Looking at dredgin in Cowlitz as a secondary phase which will be done by private and other funds (not out of the \$15 mil.) In another day they will know exactly what is in the river.

The river residue will be placed on the banks - still considered inside river- under allowances of federal laws in both states (WA on Cottonwood Island) Many locations are needed for spoil areas.

At this time they do not envision bringing dredges from the east coast and canal -- would take too much time and cause too much traffic on the river.

gh



Regarding the real volcano

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DE WASH 113 1341600
R 141700Z MAY 81
FM DES WASH
TO FEMA REG TEN
REG TEN STATE CD DIRECTORS
NATIONAL GUARD BUREAU
SALEM. OR

MAY 15 1981

Governor Atiyeh

BT UNCLAS 0730 PDT MAY 14, 1981 MT ST HELENS PLUME TRAJECTORY FORECAST WIND TRAJECTORIES GO TO THE NORTH THROUGH EAST. TRAJECTORIES ARE EAST OF A LINE FROM THE MOUNTAIN TO ALONG THE CASCADE MOUNTAINS AND NORTH OF A LINE FROM THE MOUNTAIN TO PENDELTON. WINDS ALOFT NEAR MT ST HELENS AT 7 AM PDT ELEVATION FEET WPND FROM DEG SPEED KT PLUME GOES TO 6000 240 10 NORTHEAST 12000 270 15 EAST 18000 230 20 EAST NORTHEAST 24000 210 35 NORTH NORTHEAST 200 60 NORTH NORTHEAST 30000 230 30 EAST NORTHEAST 40000 50000 260 15

US GEOLOGICAL SURVEY AND UNIVERSITY OF WASHINGTON VOLCANIC AND SEISMIC ACTIVITY AT MT ST HELENS REPORT AT 0800 MAY 14, 1981 WEATHER ALLOWED FIELD WORK AT MT ST HELENS UNTIL LATE AFTERNOON ON WEDNESDAY, MAY 14, 1981.

FIELD CREWS CONTINUED GEOLOGIC, HYDROLOGIC AND DEFORMATION STUDIES. MAINTENANCE AND INSTALLATION OF SEISMIC AND COMMUNICATIONS SYSTEMS WERE PERFORMED. SEISMIC ACTIVITY AT MT ST HELENS HAS REMAINED AT A RELATIVELY LOW LEVEL, WITH OCCASIONAL SEISMIC BURSTS DURING THE PAST 24HOURS. A SLIGHT INCREASE IN SEISMIC ACTIVITY LOCAL TO THE MOUNTAIN WAS RECORDED FOR TWELVE HOURS STARTING AT APPROXIMATELY 0500 AM PDT.

OBSERVED ACTIVITY DURING DAYLIGHT HOURS INCLUDED SOME INCREASE IN PLUME HEIGHT STARTING APPROXIMATELY 0500 AM PDT. ANOTHER INCREASE IN PLUME HEIGHT WAS REPORTED AT APPROXIMATELY 1430 PDT. THE INCREASED EMISSIONS, PRIMARILY GAS AND STEAM CONDENSATE, CONTAINED SOME MINOR AMOUNTS OF FINE ASH. THE PLUME WAS SUSTAINED CONTINUALLY THROUGHOUT THE DAY, AT TIMES REACHING ALTITUDES OF 11,000 TO 12,000 FEET.

HYDROLOGIC CONDITIONS
STREAMFLOW OF THE TOUTLE RIVER IS RECEDING AS IS NORMAL FOR THE MIDSPRING SEASON; HOWEVER, FLOW IS SOMEWHAT LOWER THAN NORMAL FOR MAY.
GEOLOGICAL SURVEY HYDROGRAPHERS MEASURED A STREAMFLOW OF 1450 CFS
ON MAY 12 AT THE MOUTH OF THE TOUTLE RIVER. THE 53-YEAR AVERAGE FLOW
FOR MAY IS 2200 CFS.
SIGNED/HUGH H. FOWLER, DIRECTOR
BT

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FM DES WASH
TO FEMA REG TEN \*
REG TEN STATE CD DIRECTORS
NATIONAL GUARD BUREAU
SALEM, OREGON

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UNCLAS

MT ST HELENS PLUME TRAJECTORY FORECAST

FEBRUARY 9, 1981

WIND TRAJECTORIES ARE GENERALLY TO THE SOUTHEAST.

TRAJECTORIES ARE EAST OF A LINE FROM THE MOUNTAIN TO PORTLAND AND WEST OF A LINE FROM THE MOUNTAIN TO GOLDENDALE.

BASED ON 4 AM PST WINDS

2 2 10 10 10 10 10 10 10 10 10 10 10 10 10	5 54 4 6 6	100 1001 1000 10					
ELEVATION	FEET	MIND	FROM	DEG	21	SPEED KT	PLUME GOES TO
6000			300			2.0	EAST SOUTHEAST
12000			320			25	SOUTHEAST
18000			320	61		37	SOUTHEAST
24000			320			45	SOUTHEAST
30000			310			45	SOUTHEAST
40000			310			55	SOUTHEAST
50000			310			54	SOUTHEAST

CANGEODODICAL SHUBVACTANDTUNAVERSISH HELDMSHINGTON SEISMIC ACTIVITY HAS REMAINED LOW AT MT ST HELENS OVER THE WEEKEND. FIELD MEASUREMENTS MADE ON FRIDAY, FEBRUARY 6, AND SATURDAY, FEBRUARY 7, INDICATE THAT THE NEW LOBE DID NOT EXHIBIT SIGNIFICANT VERTICAL GROWTH OVER THAT TIME PERIOD. HOWEVER, SLOW LATERAL SPREADING WAS OBSERVED TO OCCUR. APPROXIMATE ELEVATION AT THE TOP OF THE FEBRUARY LOBE IS 2037 METERS. ADDITIONAL FIELD WORK IS NEEDED TO DETERMINE IF THE DOME WILL STABILIZE AT THIS STAGE OF DEVELOPMENT. ADVISORY FROM SATURDAY: THE FOLLOWING IS A COPY OF THE MT ST HELENS VOLCANO ADVISORY FROM USGF VANCOUVER AND UNIVERSITY OF WASHINGTON SEATTLE. THESE NOTICES WERE PREPARED BY USGS WITH THE COLLABORATION OF U OF W GEOPHYSICS PROGRAM, FEBRUARY 7, 1981, AT 1145 HOURS PST AND DISTRIBUTED TO US FOREST SERVICE (GIFFORD PINCHOT NATIONAL FOREST, VANCOUVER), AND THE PIO'S OF USGS AND USFS, VANCOUVER. "VOLCANO ADVISORY ISSUED 2/7/81. 1145 AM:

SEISMIC ACTIVITY AT MT ST HELENS HAS REMAINED AT A LOW LEVEL FOR THE PAST 36 HOURS. FIELD OBSERVATIONS AND MEASUREMENTS INDICATE THAT THE RATE OF GROWTH OF THE DOME HAS DECREASED SIGNIFICANTLY. IF THIS ERUPTION CONTINUES TO FOLLOW THE PATTERN OF THE DECEMBER-JANUARY ERUPTION, SCIENTISTS OF THE USGS AND U OF W FEEL THAT THE POTENTIAL FOR A LARGE EXPLOSIVE ERUPTION IN THE IMMEDIATE FUTURE HAS DECREASED. HOWEVER, WE CAUTION AS BEFORE THAT IF (REPEAT IF) AN EXPLOSIVE ERUPTION WERE ABOUT TO OCCUR, WE MIGHT NOT SEE ADEQUATE PRECURSORS. LOCAL HAZARDS ASSOCIATED WITH THE GROWING DOME REMAIN HIGH. WE WILL ISSUE A FURTHER ADVISORY WHEN DOME GROWTH HAS STOPPED."

SIGNED/HUGH H. FOWLER, DIRECTOR

BT

ECZC
ADMN9 RWRE 051840
NATIONAL WEATHER SERVICE FORECAST OFFICE
PORTLAND OREGON
10.40 AM PST THU FEB 5 1981

MI ST HELENS RADAR UPDATE ....

THE NATIONAL WEATHER SERVICE RADAR AT PORTLAND IS NOT DETECTING ANY VOLCANIC ACTIVITY FROM WI ST HELENS AT THIS TIME.

AT 10.30 AM PST THIS MORNING...FOREST SERVICE AIRCRAFT IN THE VICINITY OF THE PEAK REPORTED TOPS OF THE STEAM TO 15500 FEET WITH NO DETECTABLE DRIFT. A STEAM DISCHARGE ABOUT 10.10 AM PST REACHED 17000 FEET.

AS LONG AS THE PEAK CONTINUES TO VENT PREDOMINATELY STEAM IT WILL BE NEARLY IMPOSSIBLE FOR WEATHER RADAR TO DETECT ANY ACTIVITY. VOLCANIC ASH IS EASILY DETECTED AND THE RADAR WILL BE MONITORED CONTINUOUSLY FOR THIS POSSIBILITY.

FURTHER STATEMENTS WILL BE ISSUED ABOUT EVERY TWO HOURS OR SOONER IF NECESSARY.

END/ROE

NNNN

WEATHER DISCUSSION FOR OREGON NATIONAL WEATHER SERVICE PORTLAND OR 11 AM PST THU FEB 05 QOIQ

THE UPPER WEATHER SYSTEM IS CURRENTLY ON THE NORTH OREGON COAST. THIS IS SPREADING OCCASIONAL SNOW TO PORTIONS OF EASTERN OREGON AND SCATTERED SHOWERS TO NORTHWEST SECTIONS. FREEZING LEVELS HAVE DROPPED TO 2500 TO 3500 FEET OVER THE CASCADES BRINGING SOME SNOW TO THE MOUNTAINS.

THE WEATHER SYSTEM IS EXPECTED TO GRADUALLY DROP SOUTHWARD ALONG THE COAST. THIS WILL BRING A DECREASE IN SHOWERS TO ALL BUT THE SOUTHEAST SECTION OF THE STATE TONIGHT AND COME CLEARING ON FRIDAY.

FRECIPITATION HAS BEEN HEAVIEST ALONG THE CENTRAL AND SOUTH COAST.

BIGNESSR TROOPER COMMUNICATIONS DIVISION STATE POLICE HEADQUARTERS SALEMOREG TEMPORARY

WOUSOO KSEA 051456 ZCZC ADMN RWRE 051530 NATIONAL WEATHER SERVICE SEATTLE WA 730 AM PST THU FEB 5 QOIQ

MMMMOUNT ST HELENS PLUME TRAJECTORY FORECAST ...

WINDS ARE VERY LIGHT EARLY THIS MORNING AND DIRECTIONS WILL VARY. A LOW CENTER IS CENTERED OVER SOUTHWEST WASHINGTON AND IS DRIFTING SLOWLY SOUTHWARD. WINDS CIRCULATE IN A COUNTER CLOCKWISE DIRECTION AROUND A LOW CENTER. THUS WIND DIRECTIONS WILL GO GENERALLY TO THE SOUTHWEST LATTER TODAY...BUT THERE WILL BE MUCH MEANDER IN LIGHT WINDS EARLY TODAY. LATTER TODAY...TRAJECTORIES WILL BE SOUTH OF A LINE FROM THE MOUNTAIN TO ASTORIA AND WEST OF A LINE FROM THE MOUNTAIN TO CASCADE LOCKS. EARLY TODAY HOWEVER TRAJECTORIES WILL GO IN ALL DIRECTIONS TO ABOUT 50 MILES FROM THE MOUNTAIN.

ELEVATIONFEET	WIND F	FROM DEG	SPEED.	KT	PLUME	GOES TO
6000		VARIABLE		10		MEANDERS
12000		PYP7		15 QT	WEST	SOUTHWEST
18000		PYP 4	ALD	25 W T	WEST	SOUTHWEST
24000		PYP	00	35 ET	WEST	SOUTHWEST
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AVIATION WEATHER....
BECOMING MVFR WITH LAYERS TO ABOUT 10000 FEET. PARTIAL CLEARING THIS AFTERNOON. FREEZING LEVEL 3500 FEET.
ZIMMER MAN

VJLCANZ INFORMATION BULLETIN

\*\*\* \*\*\* ERUPTISH ALERT\*\*\*\*

THE FOLLSWING INFORMATION WAS RECEIVED FROM THE CASCADE VOLCAND CENTERAL OSOS, DATE. PLEASE PASS ALONG TO LUCAL EMERGENCY SERVICES DIRECTORS.

"SEISMIC DATA OF THE LAST SEVERAL HOURS INDICATE AN ERUPTION OF MT ST HELENS WILL PROBABLY BEGIN WITHIN THE NEXT 12 HOURS. THE SEISMIC AND GEOLOGIC DATA INDICATE THE ERUPTION WILL MOST LIKELY BE OF, THE DOMB BUILDING KIND, AS WERE THE ONES OF DEC 27 AND JAN 4.

HØWEVER, DUE TØ SØME SIMILARITY ØF PRECURSERS BEFØRE THE EXPLØSIVE ASH ERUPTIØNS ØF JULY 22 AND ØCT 16 AND THE CURRENT ØNES WE FEEL THAT AN EXPLØSIVE ERUPTIØN IS A DEFINATE PØSSIBILITY."

BIGNESS, SR TRØØPER CØMMUNICATIØNS DIVISIØN STÅTE PØLICE HEADQUARTERS SALEM.ØREGØN GHB

# NOTIFICATIONS:

DENT. GENERAL SENVICES - R. GASLON

DEPT: ENERGY - D. GODARD

HIGHWAY DIVISION - F. LACEY

M. LITARY DEPT: - B. MITALSERT

GENLOGY - J. BERLUCU

GOV'S OFFICE - B. CLIVER.

DECY - SIM SWENSON

HEALTH - D. MCFARLING

UMDA - McGROOM