13th

Last night the temperature got down to 27. It must have been cold for a long time, because the ice on one of the buckets was one-eighth of an inch thick. The potatoes and apricots froze, and I guess we lost our entire fruit crop. Maybe the Nanking cherries and the currents survived.

I called the VA hospital in Portland and was told that Mike could go to the Administration section any week day. Mike plans to take the bus from Burns tomorrow.

I now have the preamplifier stage finished in the chasis of the receiver.

When I took the covers off the plants in the garden I was glad to see them undamaged. (four tomato planta, eleven pepper plants, and one squash vine)

We are all set to go to Burns in the morning.

It didn't freeze last night. Anyway that one night was enough.

We left for Burns at eight-twenty five. I didn't drive the usual forty-five miles an hour, but cut the speed down to not over forty. At that speed there is less danger of getting rock punctures in the tires.

When we got to the highway I drove between 45 and 48.

45 on our speedometer means our actual speed is closer to

50.

In Burns we learned that the bus for Bend leaves at eight in the evening. That would make a long wait for Mike. We decided against driving to Bend, because we wanted to buy a couple barrels of gas to take home.

When we first stopped at the Standard bulk plant, no one was there. We parked near the gate and got out our lunch. Before we finished eating one of the trucks drove up.

The driver said, "You'll have to see Mr. Weeks. I'm going to the Ford Garage anyway. I'll be right back."

We drove to the Ford Garage and went in to see Mr. Weeks. The driver was there ahead of us and had already talked with Weeks. He said we could have the gas.

We saw Weeks briefly. He said to come back some other day and fill out a form for our allotment. "Find out the amount of gas you used in 1972. That will be the bases for the amount of gas you can get this year."

We had brought an old leaky barrel to trade in for a new one. The driver wouldn't take the old barrel but gave us one that had had stove oil in. They didn't want it.

So we got two barrels of gas, 111 gallons \$48.80.

From there we drove over to Ellis Mason's. His mother was there but didn't know Mike. She opened the door just a crack, and Mike gave her the eggs.

Then to Tillers and got a picknick ham, seventy-nine cents a pound. We got two trays of cabbage plants for Dora.

I took Mike to the bus depot. He was going to find something to read during his long wait.

I drove most of the way home at forty miles an hour.

At home I unpacked the incubator that we had picked up at the Sears order office along with the spade. I found that the screw and locknut for the thermostat control wasn't in the box.

I looked through the odd screw assortment and found one the right size and with the right threads. The threads didn't go far enough. I got the threading tool and cut threads farther up.

I now have the thermostat control on and am testing it out.

I covered the plants in the garden again tonight. More squash are coming up. I covered them with sand.

I called Dora around seven o'clock. She hasn't heard from Pat. She is going to Burns tomorrow, where she will attend some kind of school concerning school boards. She thinks Pat will be on the bus from Portland. Joe will be the only one on the ranch tomorrow. Their potatoes didn't freeze.

15th

I was up by seven-thirty. The temperature got down to thirty last night, and the garden was covered with snow which melted away by ten o'clock.

I checked the temperature of the incubator and found that the regulator came on and off from 101.25 to 103.

May, 1974 4

I examined the peach blossoms and could see the little peaches deep in the blossoms. They hadn't been frozen. Being so deep in the blossom they were protected from the freeze. If the freeze had come a little earlier or a little later they would probably have frozen. From this I'm hoping some of the apricots, and plums may have survived. I should know in a couple of weeks.

More squash and beans are coming so I'll have more stuff to cover up each evening.

After unloading the gas barrels I drove down to get the mail. There was no letter from the F.C.C. or from the Heath Kit Company.

I started installing the mixer section of the receiver. While looking for a part on the work-bench apron, I pulled the apron out too far and it spilled everything onto the floor.

I picked up the stuff, and while I was at it cleaned up the bench. I separated the tools from the junk and arranged them in an orderly manner. Hope I can keep them that way.

I went down into the garden and hooked up some hoses, and got the "back and forth" sprinkler going to water the lower section of the garden.

I called Joe today. He is all by himself. Pat wasn't back from Galand's funeral, and Dora was still in Burns. Red Hanna was also in Burns.

11th

The temperature last night got down to thirty-two.

There are patches of snow on the ground.

I called Joe. Dora isn't back. He found two more hens setting on nests. One had fifteen chicks.

I finished installing the mixer section in the receiver. I put a 470K resister in place of the diods in the B+bias side of the RF amplifier. I also changed the resistance in the negative side, and obtained a voltage on the collector one half the supply voltage. I added capacitance to the RF tuning. I put an antenna tuning capacitor and a filter to get rid of a frequency that was causing interference. Using the transimiter I calibrated the tuner.

In the garden I found more beans, squash, and corn coming up. I covered them with sand, and didn't uncover the tomatoes and other stuff. It was so cold.

The incubator is maintaining a temperature between 101 and 103. I will put in the eggs tomorrow.

The temperature got down to twenty-nine last night.

There is still some snow around. I left everything covered in the garden.

At eleven o'clock I candeled forty-six eggs and put them in the incubator.

The temperature got up to only ninty-six, so adjusted the control. Now it keeps between one-hundred and two and one-hundred and three.

I went down and got the mail. There was no letter from the FCC, and no transistors from the Heath Kit Company.

I called Dora. Pat came home and he mother came with her. Their potatoes froze Thursday night so it must have gotten pretty cold down there.

I went to bed at four a.m. and got up at eight a.m.

I didn't close up the little chickens last night so they were already out.

Temperature got down to twenty-seven, and the ground froze. The squash vine under the box got nipped, also some peppers and tomatoes. I think they will survive.

Bessie called. Her phone had been wringing and she didn't get to it in time so she called here thinking that it may have been us.

We talked about Mike's cataracts. She said that her mother had cataracts on her eyes for years. She said that cataracts sometimes come to a stop and don't get worse.

I hooked my front-end amplifer to the IF strip of the old receiver and the audio output to the test-audio amplifier. It works very good.

I hooked the iner conductor of the coax to the imput coil through a varible capacitor. I couldn't connect the shield directly to ground. I will use a capacitor between the input coil and ground, so I can use a coax connection on the chasis.

I turned the eggs in the incubator twice today. After the first turning it took the temperature seven hours to get back up to nearly one-hundred and three degrees. The eggs around the outside are cooler than those near the center.

This evening I heard Ellis arranging reservations for his plane trip to Los Angels and back. He will leave on the twenty-fourth, and will be back on the twenty-seventh.

I uncovered the plants around ten o'clock and covered them up again around four. In spite of the cold weather some things are still coming up— unions, carrots, beans, squash, and corn.

The little white hen that has been wanting to set is more determined now.

19th

The weather was warmer this morning. I hope the cold spell is over.

20th

The renewal for my license came from the FCC. I checked into the second session of the OEN. Frank couldn't hear me. Someone relayed me in.

The SBE-34 isn't getting out very good.

I covered the plants again tonight.

21st

I checked into the California Weather Net. Cliff couldn't hear me very well. On the CDN, Frank, couldn't copy me very well either.

I talked with Alice after the Beaver State Met closed. She said that my signal was very poor, and thinks that there is something wrong with my antenna.

Mike told her that he had a preliminary examination of his eyes last week. He is entering the hospital Friday to have cataract operations on his eyes.

I was relayed into the first session of the OEN to- night.

22nd

I checked into the California Weather Net using my B&W rig. Cliff said that my signal was better than yesterday.

I checked into the CWN tonight. Cliff said my signal was very poor, so I decided not to get on again until I found the trouble.

I didn't cover the plants tonight. It looks as though a warm spell is at hand.

23rd

I found a broken connection of the inner conductor at the antenna. With it repaired the tuner of the receiver works okay.

I started tuning up the B&W transmitter, and was doing fine until transformers began to shake the bench, and smoke appeared. I tripped the switch in a hurry.

I removed the chasis and cleaned it with the vacuum cleaner. I found a tube shorted in the multiplier section.

Also one dead power tube, and several weak tubes.

Nay, 1974

I replaced the tubes including one 6146. It tuned up good on AM, but when I switched to SSB, the meter needle hit the pin. I turned off the switch in a hurry. I checked the tubes in the SSB section, and found two shorted and several weak ones. There are five 6cl6es and all show short. I think my tester is wrong.

I worked late and got the transmitter ready to use on AM.

I went to bed at three o'clock.

I forgot to record that Frank Lake called asking about the weather. He and Gery will be up this weekend.

I checked into the California Weather Net with the B&W on AM. Cliff gave me a good report.

On the CDN WA7J came in loud. Every time I transmit the receiver is overloaded and drifts back onto frequency slowly.

I talked with Jerry for forty-five minutes. He said that my signal was good.

I hooked up the SBE-34 and found a way to tune out the carrier.

I contacted Jerry on the OEN. He said that my signal was very good. He put a phone patch through to Bruce. Bruce said that Carolee went to Portland with Mike today.

I candled the eggs in the incubator today. They are all developing.

25th

I was up at seven. I cleaned a lot of junk off the table, and washed all the dishes.

Breakfast consisted of— One orange, one strip of bacon, one fried egg, a cup of coffee, and one biscuit.

The Lake brothers arrived at nine-thirty just as I finished breakfast. We visited for about one and a half hours. They had driven over from Noti during the night, getting to the mouth of Indian Creek about one-thirty a.m. where they made camp.

They parked their pickup out at the point, and rode their motorcycles over to the Big Alvord Creek, where they left their motorcycles. They intended to hike up the mountain and camp over night.

When we went out to the point we saw a pickup with a canope parked on the upper road. No one was around. I went over to see where their footprints might lead. Apparently they had gotten out packs and headed up the mountain. There were a lot of foot prints at the back of the pickup where probably they had been putting packs on their backs.

It seemed odd that they had stopped there without coming to the house. Whoever they were they must have been familliar with the place.

Today I ran the sprinkler on both the lower and upper end of the garden. Beans are popping up out of the ground and the potatoes are making a fast recovery. Some of the strawberries were frozen during the last freeze.

May, 1974 11b

There is no sign of the giant squash that started to come up before the big freeze. Some of the summer squash are growing but the cold set them back. It appears that those that came up before the freeze got clobbered and the ones I see now have come up since. The peaches, apricots, and plums are all frozen.

The old-mother hen has left her brood and joined the other old chickens in the hen house. The little white hen has quit setting, but the blue hen doesn't give up. When the eggs in the incubator hatch, I will give her a couple to make her happy.

I checked into the first session of the OEN. Jerry called for me and we went up frequency. He put a phone patch through to Mike. They didn't keep him at the VA hospital. They told him it might be ten years before his eyes would be ready for an operation. He will go back next year for another examination. Bruce will bring him out some time next week.

I have the B&W tuned up on 3660 ready for the schedule with John tomorrow night.

After the phone patch, a breaker came on frequency. It was WA70DG/7, Morrie, at Page Springs Park. Win and Hazel and another camper were with him. He said he would consult the others about coming around the south end. I doubt very much that they will get up here even if they do get around the south end.

I called Dora and told her the news about Mike.

For lunch today I had a dish of pork and beans, apple-sauce, and one biscuit. For dinner I had one German fried potato, one wiener, six graham crackers, and two cups of chocolate. That made too many calories, especially the crackers and chocolate.

I read the meter today on schedule. 26th

I was up at six-forty. The high yesterday was 81. The low last night was 54, and at eight a.m. it was 62. So yesterday was the hottest day so far this year.

My weight was up slightly from yesterday, so today I had no chocolate or graham crackers. For breakfast I had one egg and one orange.

Morrie and Connie got here about eleven o'clock. None of the others of their group came up. Connie took a picture of Morrie and myself. I took one of Morrie and Connie. I showed them around the place. They left at eleven-thirty.

Frank and Gery came down off the meadow at one o'clock. I thought that they must have come over the Alvord Road. However, when they got here they said that they had come back last night and road their bikes up passed the mine, and camped out near the head of Pike Creek. There wasn't any good places to camp up the Big Alvord Creek.

They were starved, so I cooked some potatoes, and fried the ground beef they brought with them. Then dished up some ice cream.

I ate more than I should have. Yet before nine o'clock

I ate a hot dog with a slice of bread, some beans, some

apple sauce, and four grahm crackers.

Frank broke open a box of slides that he received just as he left home. They consisted of pictures of their hunting trip last fall. He had wanted to show me a picture of the big squash. But he hadn't goten the film properly started in the camera, so the first twenty pictures he snapped didn't take. They hadn't moved when he cranked for the next picture. The gears weren't in the slots.

After lunch I showed them the rock crusher and the ore bin. We got back into the house just in time for me to get ready to meet John on schedule.

The receiver still went off frequency every time I transmitted.

Fifteen minutes to six Bessy Blair came in. She had come up to get some strawberry plants. She was astonished at the way I talked with John. She couldn't believe I could make anything out of those squeals.

After my schedule with John we went down in the garden and dug some strawberry plants. Then brought them up here and put them into her pickup. She was afraid to back her pickup out to the point, and asked me to do it for her.

Frank and Gery drove out onto the desert and looked at the drilling rig. Then drove to where the workers were camped at the willows at the edge of the desert.

The workers told them that the BLM had given them a contract to drill the holes. They were capping the holes and leaving the casing down. They did this in case they might work on them again. The BLM said that they couldn't leave the drill cores on the desert, but would have take them off to a dump somewhere.

They couldn't find the dump, and when they asked Dora where it was she said that she didn't know. Apparently she thought they were BLM people. They told her that they were from the Department of the Interior. Then she remembered where the dump was.

Frank and Gery bunked down here tonight. They were up before seven o'clock. I was getting up as they came outside heading for their pickup.

It was a bright sunny morning. After breakfast they started to put the bikes onto their pickup, but Gery had a flat tire.

Before he could get it patched we heard his friend approaching in his light plane. Frank drove down to the county road and picked him up. Actually there were two of them, both named Jim. One was a boy about fourteen. Frank said that the plane only weighed seven-hundred pounds.

Jim wasn't sure whether or not he could make it back to Eugene on account of the rough and cloudy weather. At noon I contacted WA7MOK on the Beaver State Net and she gave me a weather report on the Eugene area. There was sunshine and clouds. So Jim figured he could make it.

In the morning Gery and Frank put the door closer back up. This time they put the end next to the hinges a little further out so it had more torque to hold the door closed.

We all went up and showed the two Jims the ore bin and the rock crusher. We noticed that the belt was under the tongue of the rock crusher. Frank got a pry and lifted up the tongue while we pulled out the belt. I put it into the ore bin.

We also noticed that one guy wire to the stack was quite loose. Frank got a wrench and we tightened it.

About one o'clock Frank and Gery took the Jims down to the county road to get on their plane and fly home.

When they got back they loaded up, and around three o'clock they were ready to leave. But before they got going we saw the two hikers coming down the road on the other side of Indian Creek. I persuaded the Lakes to drive out to the point and wait for them. They were hesitent to do so, but when the boys came up, Frank and Gery talked with them with apparent interest.

After Gery and Frank drove off down the road, I invited the two boys down to the dugout for coffee and a bite to eat. They seemed glad to accept the invitation.

While they were here I talked, and tried to put them at ease. I didn't learn much about them. They seemed very reluctant to talk about themselves. Before they left I asked them their names. One called himself Tom, and the other Bruce. They were from Corvallis. One was going to college.

After they left I got the sprinklers running in the gardern. I'v been checking the plum and peach trees for signs that some fruit are growing. It looks as though there may be quite a few peaches. Maybe there will be some plums. I cant tell about the apples yet.

I was up before seven. The weather net closed before I could check in. Morie tried to check in but was also too late. I gave him a call, and we talked a while. I gave him a run down on how things are here. He said that George came over to see him about twice a week.

Later I got the short sprinkler running under the peach trees.

I worked on the SSB section of the transmitter and finally got it operating. I also worked on the receiver trying to modify the local oscillator. I tried to replace the diodes in the bias circuit with resistors, but couldn't get it to oscillate, so put the diodes back.

I may try again tomorrow. This time leave the voltmeter out of the circuit. The voltmeter leads could cause extra oscillations. I need to get it not to go off frequency every time I transmit.

29th

I was up at six-forty. I turned on the back-and-forth sprinkler in the lower garden, and turned off the short sprinkler under the peach trees.

I checked into the weather net. Cliff was back. Then checked into the OEN and moved off frequency with Jerry. He connected up his phone patch, and called Mike.

Mike is helping Bruce put in a septic tank. They won't get out until the weekend. Carolee isn't coming because Bruce wants to stay here a few days to look for rocks down near Denio. Mike will have two sacks of wheat for the chickens.

The garden gate came open and chickens got in and scratched out a bit of corn. They sure work hard scratching for those worms.

About noon Ellen Storm came walking down the road with her boyfriend, Peter. They visited most of the afternoon. We watched the birds, and checked in the bird book to identify the bird with the nest in the windmill. Ellen decided it was a "Western King Bird". I'm sure she is right.

I drove them down to the mailbox about four-thirty. When I stopped to get the mail they got out. There was no mail, but a couple Rimrock Press papers were in the box. I gave one to Peter to take to Davy.

They were staying at his camp, and had walked from there to our place. They said that they had hitch hiked from Corvallis. They are going back tomorrow, and after seeing the small amount of traffic on this road, they decided to take the stage to Burns.

While we were talking at the mailbox a car came from the Andrews direction. They hailed the driver for a ride to Pike Creek. I heard the driver say, "I don't know where Pike Creek is."

Peter said, "About two miles up the road." So they got in and away they went.

Back up here at the dugout I went down into the garden and moved the sprinkler in the lower garden. I moved the one under the peach trees, but didn't turn it on. I will turn it on tonight after turning off the one in the lower garden. I picked runners off one row of strawberies.

After dinner I salvaged a nine-volt zenner diode from the surplus power supply. I checked out a resister to go with it for 5 ma of current. Then installed them to supply nine volts to the local oscillator in the receiver. With the regulated voltage on the oscillator I didn't have to tune the receiver after keying the transmitter.

However, the receiver drifts for about an hour after turning it on. I will have to figure out what makes it drift so much.

This morning when I was in cantact with Jerry he said I had a double side band signal, so will have to look into that.

30th

I was up about the same time as usual. It felt cold out, although the low last night was thirty-seven degrees. I hope we have missed getting a frost.

On the weather net I told Cliff about the transmitter trouble. He said I had a good strong signal.

I went to sleep and missed the Civil Defense Net. At noon I couldn't hear the Beaver State Net control, but contacted Alice and had a qso with her. She said that my upper side band was much weaker than the lower when I was in the lower. Maybe the switching of tubes this morning helped. I'll check with Jerry the next time I talk with him.

Alice said that it was twenty-four degrees in Bend last night.

She said to let her know how Mike was doing when I heard from him. I was surprised that she hadn't heard from Jerry about Mike. I gave her the latest news.

I fixed up a tall sprinkler on this end of the corn.

This afternoon I was checking the voltage from the power supply, since I was planning to adjust it to twelve volts. I keyed the transmitter. A serge of voltage showed on the voltmeter as well as sound from the power supply. So I could see what caused the shift in frequency after transmitting.

I fugured that the large capacitor at the imput to the receiver might be causing the long drift time when the receiver was turned on. I took the capacitor out and put a twelve volt regulator diode in its place. Now there is only a slight drift for a short time, and it is in the other direction.

Tomorrow I'll put a regulator on the input to the IF strip.

I checked into both sessions of the OEN tonight.

I moved the short sprinkler under the peach trees and started it for the night. Then turned off the sprinkler on the corn.

There is a Poor Will sounding off just above the dugout tonight. I picked the runners off two more rows strawberies today.

I hiked up to the mine but didn'g get all the way up to the diggings. The mosquitoes drove me back. The part of the trail that runs parallel with the road has slid off and is gone. I noticed that the wheels of the ore car are missing.

I was up at ten after five. I turned on the receiver and found that it drifted very rappidly. The power supply has to warm up. It continued drifting downward for about an hour. It started drifting upward after that, but not very fast. Later it started slightly down again. It must be caused by small changes in the regulated power voltage.

I contacted Jerry on the CDN. He said that my upper side band signal was down 2 db from the lower side band signal when I was in lower. Alice broke in and said that my upper side band signal was 20 db down when the lower was 40 over 9.

Dora called and said that she had her lawnmower working good. So I won't have to go down there.

Some peaches are definitly developing. There may be some plums developing. A few squash came up. I will plant more even though it is too late for planting them.

Bagworms have destroyed some of the beans that just came up. They have eaten holes in the potato and turnip leaves. I had one sprinkler running on the mellon hills and corn, and another sprinkler on the old cabbage patch.

With the Zenner diode in the receiver circuit the power supply voltage became erractic above thirteen volts. Apparently there is too much current used for good regulation. There seems to be a poor contact point somewhere in the receiver circuit.

I checked the voltage at the power pack output when I turned on the power. Instead of the usual six volts at the low end it was two and a half volts and fluxuating. I raised the voltage. It was irractic and moved up in jumps.

I disconnected the RF section, so only the IF section was using power. The voltage was steady. I put a milliamp meter in the RF circuit and varied the supply volage. It was steady and would move up and down smoothly. I removed the milliamp meter and it still worked smoothly.

1st

John, Dorathy, and Ralph left this morning.

Late in the afternoon I straightened out the coax cable that was lying on the side of the hill. Then realed out the new coax. It lacked about two-hundred feet of reaching the antenna.

Mike hiked up to the upper spring.

2nd

This afternoon Ellis called on the phone to say that he, Shirley, and David Peterson would be down late this evening for dinner. Shirley was preparing a meat loaf, and a potato salad.

They got here about eight-thirty, just in time for Ellis to talk with Jerry on the radio.

Earlier Jerry had contacted me and read from the Bend paper about the robbery of Bruce's and Carolee's jewelry store. He put a patch through to Bruce. I asked him how he was doing. He has already made enough new jewelry to replace half of the loss which was supposed to be \$1,000. He said that Betsy was wanting to come out her shortly after the Fourth.

We had a dinner of meat loaf, potato salad, pig-weed greens, corn, bread, strawberries, and ice cream.

3rd

Ellis brought out an old TV set, and a plastic tarp for us.

After a breakfast of sourdough hotcakes, and bacon and eggs, Ellis and company left for Fish Lake.

I sent an order to Jafco for a 1200 watt blender.

This evening I strung out the two short lengths of $\cos x$. They just reach the antenna.

Mike hiked up to the spring again today. He said that he made it easier this time than he did the last time.

For the last few days I have noticed my heart skipping beats when I'm resting. I seem to be all right though.

I finished hooking up the short sections of the coax cable, and put the amplifier in the circuit. I made ten trips up to the antenna. The exercise felt good. I got no signal down at the house. Mike hiked up to the spring again. He dressed out the old rooster.

This afternoon WA7PQL, John, from Beaverton stopped with a friend. The field man for the county was here with a friend.

I went for the mail at two o'clock. The mail truck wasn't there yet. While I was waiting I saw the last glider being hauled off on a trailer.

The exhaust pipe arrived with the mail.

Mike put the muffler onto the pickup. Now we have the proper muffler and pipe, so everything fits better.

 \supseteq

I went up and got the piece of coax that had a break somewhere.

I made a second batch of sourdough biscuits.

While I was up after the coax cable, two different parties showed up. Mike didn't bring them into the dugout to give them the grand tour.

I picked a mess of peas, and put the pods with the bud of a sunflower through the blender. They both make a good drink.

There was a thunderstorm this afternoon, but only a sprinkle of rain.

7th

After fixing the break in the coax cable, I again hooked the amplifier into the lead. There was no signal down here.

I then took the TV set up to the antenna and tried the amplifier in the circuit. The picture wasn't as good as it was without it. Without the booster the picture at the antenna is steady and clear, although dim in the bright sunlight.

Mike dressed out two young roosters, and pulled runners in the strawberry patch. He took a hike up to the spring. He is digging into the spring to see how much water it will run.

8th

A light rain all night produced .07 inches of precipitation. More rain this morning made .16 inches more.

Mike planted peas and lettuce today. Jerry put a patch through to Betsy. She will be coming out Thursday or Friday. She is coming by bus to Burns, and we will pick her up there.

Mike fixed another tire, and pulled a lot of weeds in the garden.

The .35 inches of rain didn't soak the ground very deep. By three-thirty the road was dry enough for me to drive down to get the mail. I turned around at the gate, and walked the rest of the way down.

We had peas for dinner. I put some of the pods through the blender, then strained out the juice and mixed it with blended onion tops that I had from thinning the onions. I added some blended potatoes and cooked the mixture. It turned out to be a green colored dish. It was good.

It rained most of the day. I did more reading than I usually do.

10th

Jerry put a patch through to Betsy to find out if she could come out to Burns with him and Margaret tomorrow. She said that she could, so we will go to Burns and meet them at Ellis's place.

We are leaving the pickup at the gate, because the road may be too muddy to drive down in the morning. Mike patched another tire, so we will have two spares. We are thinking of getting another new tire.

I talked with Jerry and Ellis on the radio tonight. Ellis is coming down this way tomorrow. We will pass him on our way to Burns. Jerry said that Betsy is bringing a girl friend with her. Ellis will be here Friday for dinner. His wife and his brother-in-law will be with him.

When I drove down for the mail I left the pickup near the gate just in case we got a big rainstorm that would make it so muddy we couldn't drive down the hill.

11th

We went to Burns and met Jerry and Margaret with Betsy at Ellis's place. They drove in right behind us. It was very good timing. We ate lunch in Jerry's and Margaret's trailer.

They were going to Fish Lake. We loaded Betsy's stuff along with Betsy into the pickup, did our shopping and headed for home. Betsy's girl friend didn't come.

This morning we went over to Bessy Blair's place and put up her TV antenna. It didn't work, and later we learned that we had pointed it backward. We got some water to take home.

In the afternoon Ellis, his wife and his brogher-in-law arrived. We had a good dinner, then they headed for Fish Lake.

14th

Yesterday morning Betsy and I hiked up to the head of Pike Creek. We stopped several times under the shade of

junipers to avoid the danger of heat prostration. At the first stop Betsey had a nosebleed. I was glad of the shade so she could cool down.

Ws crossed the first draw at Pike Creek, and found a good place to camp. After getting the camp set up, we continued on, and crossed four tributaries of Pike Creek. At one place a granite ridge pokes up through the basalt. It is a very picturesque place. I found an old knife with the name. "Jim Bowie" and an inscription saying, "Hand made in Germany." I think it may be a collector's item.

We got back to camp late, and had a dinner of boiled eggs, hot dogs, and cornmeal mush.

This morning we walked back down by way of Tuffy Creek.

It was hot and we were about melted when we arrived here around twelve-thirty.

27th

Last week Betsy and I made another excursion. We hiked across the desert and half way back where Mike met us with the pickup. It was a hot trip, but I hope it did Betsy some good.

We went to Burns Monday, and met Jerry and Margaret at Ellis's. We had a fine dinner that was prepared by Shirley and Margaret.

Betsy went back to Bend with Jerry and Margaret.

Today we poured concrete for the shower stall. It was hot today, and we had a light shower this afternoon. Gerald and Hazel will be here Sunday or Monday.

12th

I broke off keeping this account, because of so much company. Once I stopped, it was hard to get started again.

Gerald, Hazel, and their son Jerry was here one day.

They left their trailer near the Folly Farm. They had two flat tires on their trailer and didn't have enough spares.

They drove their pickup down here.

We all went down to Fields, and the man at the store patched the one repairable tire that Gerald had. It had a bad break in the casing, and Gerald felt it wouldn't hold up on the gravel road.

They left the next day after they arrived. They went back to the Folly Farm, hooked onto their trailer, then got onto the pavement, and headed for Bend and points west.

They phoned from Princeton to let us know that the tire was holding up that far.

While they were here the heat bothered Hazel and Jerry. They were used to air conditioning. Gerald didn't mind the heat at all. He was used to working outside in the heat and sun of Arizona.

The garden did better than we had expected this spring.

The summer has been hot and dry with few clouds. Cantaloupes have been getting ripe for a couple of weeks, also the watermelons.

Yesterday we began picking peaches. I canned five quarts this morning.

George arrived Thursday and left Tuesday. We had a fine visit. Mary got stronger every day, and she was feeling much better when they left. She was very happy to be able to come up here.

While they were here George helped clean out the furnace room. We cleared out the ditch, and poured a slab of concrete under the furnace.

Carolee, Bruce and Betsy were here over the Labor Day weekend. They brought Bill with them. He is learning silversmithing from Bruce.

I have been making whole-wheat flour from the Indian wheat. Also mush for breakfast. Mary really enjoyed the mush. She said that it was the best she had ever eaten.

The Osterizer doesn't grind the wheat up quite fine enough to make good biscuits. The biscuits come out too crumbly and dry. I plan to soak the coarse-flour mixture in water like you do cornmeal when making corn bread.

Yesterday I canned six quarts of peaches, and two quarts of strawberries. I made a pan of bread like corn bread out of the Indian wheat flour. It came out less crumbly. It needs improvement.

Friday two men stopped by. They had been here about ten years ago. At first I couldn't place them. But later I remembered one in particular. He could copy a signature with

great accuracy. Also he could do fancy hand writing. He was the one who was supposed to be a petrologist. I wonder, though, because he said that zeolight crystals were black.

The other man, Dinger, is a real-estate salesman. We told him about thinking of leasing or selling our mine. He said that he might bring a geologist down here next month when he came down this way on business.

Last Monday we went to Burns, and bought 110 gallons of gas at forty-nine cents a gallon. We bought some wheat that was heavily mixed with barley, and underweight.

Later we talked with Pat, and decided that the only thing to do was to buy wheat somewhere else. She said she would go to the Rio King Ranch with us to get some in the near future.

Today we installed the wiring for the porch light at the teacherage. It took us about four hours. We put in a temporary fixture so the teacher will have a light there until the one we ordered from Wards arrives. I sent the order off Friday.

When we got back about two o'clock, a pickup was parked at the point, and a young man was in the yard in front of the dugout. As we drove up I said, "Hi." He greeted us and asked if we lived here.

I invited him in for a cup of coffee. He seemed rather timid. He had a sort of defensive look in his eyes. I gave him a peach and half a cantaloupe which he enjoyed. He was here about two and a half hours.

He is working at the Mann Lake Ranch doing some carpenter work. Mrs. Wilson is having her kitchen remodeled. A man from Caulderwood Idaho has the contract as far as I could tell from what Bill said.

He lives in a barn near Eugene. It seems that an old woman lets him live in the barn for fixing it up. It is a well-built building, but needs some work on the roof, and some other repairs.

He does wood carving, and has made some statues for gardens around Eugene.

I talked with John tonight. Ralph and Jerry are the only ones left at home. Celia is taking nurses training at a college in Hoodriver. Jerry is working at the plywood plant.

This week I canned ten quarts of peaches, and four quarts of strawberries. The can on a long pole does fine job picking those high peaches.

Friday I heard that Jerry and Margaret were over on the other side of the Santiam Pass, going west. An auto-wrecker truck hit their trailer in the rear and damaged it some, but totaled out their car. Jerry and Margaret didn't get hurt, but their fishing trip to the coast was ruined.

Yesterday Mike went down to Pat's and finished the roof, then started working on Dora's new chicken house.

He got back before dinner, and cleared things from in front of the furnace so we can get it ready to run. I put

the water on the junipers above the dugout, and canned six quarts of peaches.

The paint and the saw blade came. It was the wrong saw blade. On the order form I had put down the number that Mike had marked. We will keep it anyway, because we need a good cabinetmaker's blade.

Today Marge and Andrew Schull came up with their electric lawnmower. Marge said that it stopped suddenly while she was mowing.

I had worked on the wiring of the switch before. It looked possible that a wire had broken where the cable does so much bending. I removed the large quantity of tape that I had used trying to give it more stability. I found a broken wire. After repairing it with difficulty, because the switch box was hard to put back together, the thing wouldn't run. I checked the continuity of the switch circuit. I found it okay. I checked the continuity through the motor. It was open.

Thus I spent a couple hours visiting while making a futile effort to repair their lawnmower.

I canned another five jars of peaches, and picked six cantaloupe.

Mike went down to work on Dora's chicken house, and got back after eight o'clock. He still has more work to do on it. He says that tomorrow he is going to put in the barrier in the ditch to hold back the dust from the burned ore from getting into the outer part of the ditch.

I got the order for the combination—saw blade ready to send out tomorrow.

22nd

Wednesday Mike went down to Dora's and worked on the chicken house. On his way he stopped at the schoolhouse, and left a bunch of cantaloupes for the teacher to give to the kids.

I canned twenty-five quarts of peaches.

Thursday Mike worked again down at Dora's. I canned thirty-seven quarts of peaches, thus making a total of eighty quarts.

Friday Andrew Schull called. He said that he would come and get me if I would come down and pump air into his water tank. I told him I would do the job for him.

Mike was working on the wall in the ditch to separate the burned ore from the outer part of the ditch.

I took our air pump down to Schull's, and began putting air into the tank. I discovered that the drain pipe from the kitchen sink leaked very badly.

The upshot of this was that I spent the whole day working on the drain, and hunting for a trap to put under the sink. I ended up giving Andrew the information needed to get parts to fix the drain. I ate lunch at the Schull's. Greg and Cactus was there.

Saturday we worked on the furnace. Mike got the blower going on the stack. We figured there must be something wrong somewhere. There wasn't quite enough draft.

I worked on the control for pulling the burned ore. Something was wrong with the light sensitive unit.

About noon the stone mason, who builds fire places, stopped in. His wife was with him. I showed them around and gave them some peaches and a cantaloupe. They didn't stay long. Roy wanted to go up to the heads of Pike and Indian Creeks to look for deer tracks. He said he would be back for the hunting season.

In the afternoon, when I was working on the light sensitive unit, Mike mentioned the light sensing unit on the yard light, which we weren't using. We dug it out and I saw that it could be used okay.

23rd

This morning early Bill Haufman arrived and got Mike out of bed. I was up, but hadn't left my bedroom.

Bill had some rocks that he wanted me to analyze. He said that he was going to a place where he had seen wire-like pieces in a rock. It was years ago when silver wasn't worth much. He thought the wire-like stuff was silver.

We continued working on the furnace and had it fired up by five-forty-five. A delay was caused by the front of the fire box giving way. We put a piece of strap iron in front and wedged the sheet metal back into place.

The jacket on the condenser leaked at the upper end, but it didn't matter much. The faucet that drains the water jacket was leaking. We put a new washer in it. That stopped the leaking.

In spite of the lack of ample draft the fire burned quite well. I watched the furnace all night until five o'clock. I shut the fire off because the ore was hanging up. 27th

The next day Mike went down to Dora's and worked on the chicken house, while I worked on the drain pipe of Schull's kitchen sink.

Andrew hadn't gotten the kind of trap we told him to get. I doubt that he could get one in Burns, anyway. He insisted that there should be something in the junk boxes around the place that would work. We spend a great deal of time looking through pipe fittings that I knew wouldn't work as soon as I saw them. There wasn't even a piece of rubber hose that I could use.

We spent some more time looking in the old house that looks like an old frontier store. There was nothing there. Then we drove to the Allied Ranch. Frank wasn't there, so Andrew couldn't get any help there.

Finally we drove up to our place where I spotted a radiator hose. It fitted over the tail pipe. A one-inch coupling fitted into the hose. This gave us the two connections we needed to hook up the sewer pipe to the tail pipe. However, it would leave out the trap. It wasn't a good way to hook up a kitchen sink. This sink had a drain field all by itself, so maybe it will do.

Wednesday morning Mike picked peaches and corn. He thought we should clean the carburetor of the pickup, and be ready to go to town Thursday. He wanted to get the shredder-bagger that had arrived at the Sears order office.

There was no other need to go to Burns. I had already told the order office that it would be two weeks before we would be in to get the shredder.

I started digging the ore out of the hopper, and tried pushing a stiff wire down into the ore hoping to dislodge the ore on the shelves. I soon gave this up. We decided the best thing to do was to remove a section of the sheeting that held the insulation in place.

I started on this and spilled insulation out onto the roof, thus exposing the barrel that housed the flues and shelves.

After lunch Mike cut into the barrel in two places, then drilled holes through the tile wall just below the two top shelves. He began with the lower shelf which was clear of ore.

The hang-up was on the very upper shelf. A little poking with a rod through the hole started the ore running down into the furnace.

If I had continued emptying the hopper we might have loosened the ore from above.

While Mike was working on the furnace, I canned up the watermelon pickles that Mike had started to make. Later I began cleaning the carburetor.

The next day we decided to fire up the furnace rather than go to town. Thursday by ten o'clock we had the furnace ready to fire up. There wasn't too much draft. I doubt the fire is as hot as it used to be. The right-hand burner doesn't burn very well. The amount of gas turned on is very critical. If the valve isn't opened far enough the fire will back up into the venturi. If the valve is opened just a little farther the flame doesn't get enough oxygen.

I stood watch over the furnace that night. It seemed to run smoothly. The new automatic control worked okay. I ran out two thirds of a barrel last night.

Thursday afternoon I got the carburetor back on the motor of the pickup, and yesterday afternoon drove down for the mail. The motor didn't overheat, but it was too short a drive to make a good test.

I slept a few hours in the middle of the day, and then a couple of hours in the evening. I was up and around so Mike could get to bed before ten o'clock.

While I watched tonight, I put some cucumbers to soak in salt water, and will try to pickle them this afternoon.

The retort has been going three and a half days now. Still there is no mercury coming down the trap. Even with low-grade ore some should be showing by now. I'd been thinking that this ore would go twenty pounds to the ton, but it seems there is something wrong somewhere.

Twice during the last three days the pulley on the blower came loose, so we had to turn off the fire a couple of times, but not for long. Yesterday, after it came loose, we put a different setscrew in the pulley, one that could be tightened with a wrench. I'm sure it won't come loose again.

We are assembling a new blower unit, getting it ready to put on the stack. With it we hope to get more draft.

Mike went down to Frazier's yesterday and opened the sewer line for Pat. He left here at nine-thirty, and got back at two. After that we worked on the blower, so I didn't get much sleep yesterday.

I was tired and thought of skipping my schedule with John. After dinner I lay down for a bit, but didn't sleep. I got up and turned on the transmitter and tuned to our usual frequency. John's C.W. sounded real good. He said that he had speeded up the bug a little.

John is going to bible classes. Apparently, now that his family is about grown, he has more time and interest in the why's and wherefore's of life.

I am quite sure now that turnips are an antidote for muscle cramps. It takes only a small quantity to keep the cramps away.

Some time ago I started making flour out of regular wheat. I also used this coarse ground flour for breakfast cereal. Soon I noticed I didn't have to take Vitamin-E to avoid muscle cramps. I thought that somehow commercial

whole-wheat flour must have something missing because none of the whole-wheat products had ever helped against muscle cramps.

Then I started using the Indian wheat flour for biscuits and cereal. I found myself having to use Vitamin-E again. I thought that Indian wheat must have less Vitamin-E than regular wheat.

There was something I had missed concerning my diet. During the time we had been using regular wheat I had been eating some turnips. Coincidentally, when we switched to the other wheat I didn't eat any turnips.

I found that I needed to take Vitamin-E. I blamed it on the Indian wheat. I switched back to regular wheat. I still had to take Vitamin-E. I ate cooked turnips for several days. I didn't need Vitamin-E when I used any kind of whole-wheat flour after that.

1st

So now to check on the turnip theory, I will stop eating them for a while.

Yesterday I got a bit of sleep in the morning. I could have slept longer, but the sun warmed the bedroom too much.

I canned three jars of strawberries, then helped Mike get the new blower up on the stack. After we got the blower mounted on a base we started the motor and let it run for a couple of hours. The motor got quite hot. You couldn't keep your hand on it. I think it can stand running hot. The blower bearings didn't get too hot.

After dinner Mike removed the old blower, and mounted the new one on the stack. When I started the fire the draft was a little better than before, and it would maintain a hotter fire. However, later the draft decreased. Maybe it was because of the cooler air. Now the fire is about the same as it was with the old blower.

Tonight I probed into the condenser box with a piece of welding rod. It came out with a grey coating that appears to be mercury sulfate. I couldn't stir up any free mercury. Now there is no water condensing, not even in the stack.

Something in the operation is different than it was before, when the mercury formed quite readily. Then there was a great deal of water. Maybe the water wasn't so bad after all. I'll put some lime in the condenser today, and hope it will take up the sulfur.

I had a good sleep last evening from eight o'clock to eleven o'clock.

I talked with Bill in Alturas this morning. I told him about Stella's poor reception from the translator. He said that she should report it to the secretary of the translator group. There has been no other complaints.

It was twenty degrees in Alturas Sunday night. We had a low of fifty-one here.

Later I called Stella. I mentioned that there might be something wrong with her set, or with the cable, or with the antenna.

She said that they had driven cattle across the cable and wondered if they may have damaged it. The cable is not buried very deep, so it might have been damaged.

When I drove down for the mail, I met a camper-pickup coming up the hill. A retired couple were looking for a place to camp. I told them of the place near the desert, and the one up on the meadow. They thought they would try the meadow.

After I got back with the mail, I looked across Indian Creek to see if they made it up to the meadow. I saw them walking up the road from Indian Creek. They walked up to the meadow, and then back down.

Mike looked over the cliff and saw that they were parked in the road this side of Indian Creek crossing.

Mike was up this morning for a few minutes, and I talked with him about the mercury sulfate forming in the condenser. He thought it would be like black soot and we could work the mercury out of it. But soot comes with sulfur uncombined with mercury. Lime would not separate the mercury and sulfur if it is a sulfate. Only when there is free mercury in the soot can you work out the mercury.

In talking with Mike I began to realize that the difference in this run from the past was that there was very little iron in the ore. Mike agreed that the iron had been screened off with the fine sand during the early processing.

Now I have put lime with the ore and some in the condenser. Results will not show up until later in the day.

The weather is still clear and warm, and there is very little wind.

3rd

Yesterday Mike poured a considerable amount of water into the hopper. I thought at the time that if the water should cause the ore to clog up it wouldn't matter because we would have to shut down anyway. I was afraid the mercury was going out the stack.

A great deal of dust went out the stack whenever the burned ore was being pulled out from the bottom. There was no condensed water in the condenser at all to help collect the dust.

Right after noon the shelves were empty of ore. There was stoppage at the throat of the hopper. Mike tried hard to free the ore, and managed to get some down to the thermometer, enough to cool the thermometer to shut off the scavenger motor.

We had some hopes of continuing the run. I went to bed and got some rest, but not much sleep. About nine-thirty I saw Mike trying to dislodge the ore. I got up and went over to the dugout. By then Mike had shut down the furnace.

So last night I went to bed for a change. I had a kind of headache so didn't sleep well.

I was up at seven-thirty still not feeling very good.

We had about eight-hundredths of an inch of rain last night. The morning was quite clear and it promised to be a nice day. After breakfast Mike suggested we go to town. I didn't say anything, but I thought I would like to have a day of rest before going to town.

By eight-thirty he changed his mind and said that maybe we should get ready today and go tomorrow.

I went to bed and got some good sleep, and was up at eleven-thirty feeling much better.

Mike read most of the day, so we both got some rest. We are ready for an early start in the morning.

I talked with Jerry and Ellis on the radio. Jerry tried to call Bruce but there was no answer. Ellis said he would be leaving for the Steens about noon. He asked us to stop by if we got to town before that.

7th

Friday I talked with Carolee on Jerry's phone patch.

Bruce wouldn't be able to come out over the weekend. He was tied up making a birthday ring for someone.

We got a fairly early start to Burns. The boy that was going to wait for us at Herb Davis's place at eleven o'clock took off before we got there at ten-forty. He didn't get back until twelve-twenty.

We bought eighteen sacks of wheat at eight dollars a hundred. We dumped it into the bottom of the pickup on top of a tarp, then covered it with another tarp.

The stores in Burns were stripped by the hunters. The town was full of hunters, also the road was full of them.

We got the shredder-bagger at Sears.

The motor burned too much gas on the way in. We bought half a tank of gas in Burns. On the way back we took the air filter off and the mileage was normal after that.

Saturday there were so many visitors we hardI'y had time to unload the wheat. Sunday we shredded some of the alfalfa. We were disappointed in the bagger. It is difficult to get a full bag, and the thing doesn't pack it in tight.

We used the pickup to haul the squash, cantaloupe, and watermelons up out of the garden. The big squash weighs one-hundred and twenty-eight pounds.

I missed my schedule with John. I had thought of the schedule before backing the pickup down to the garden. When

it was time for the schedule I was thinking about weighing the big squash. I didn't remember the schedule until ten passed six. It was then too late.

Today I wrote to John, also to George and Mary.

We put the squash and melons into the cold room, which is now not very cold, about sixty six degrees. Mike now has the back side of the cold room ready to insulate.

Visitors over the weekend were: Carl Thomas and his wife, Jim and Marion Comer, Rufus, Art Williams, Frank and Gerry Lake, a pickup full of hunters looking for a way up the mountain, and a man with a small Yamaha looking for a way up the mountain.

19th

This morning I worked on Linda Blair's vacuum cleaner. I found that the blower would not come out of the canister. The metal container that it was mounted on had been welded in place after the motor was mounted. The machine works after a fashion, but it makes more noise than it should as though the bearings were going out.

Mike worked on the cold room, getting the door battened up and putting insulation on the wall. He also found fittings for the broken air line on the compressor side.

I went up to the cabin on the meadow. Carl Thomas has made the place look as though it is occupied. The door has a padlock on it.

On the eighth Bruce and Bill arrived. Bruce got interested in working mercury out of the dust that had gathered in the condenser. He recovered about eight pounds.

During his stay of one week we got the compressor going and drilled six holes in the rock wall to the right of the tunnel. We found that most of our fuses were no good. Also the fertilizer we have isn't the exploding kind.

Bruce was a great help with the compressor. Also in getting the rock drill going. Mike and I found that the drilling was too much for us. Bruce manhandled the drill quite well.

We will fix some kind of rig to hold the drill in place.

The weather continues to be dry, clear and warm.

Thursday Dora called. The freezer out in the storage room wouldn't run. She had defrosted it, and after starting it up, it ran long enough to bring the temperature down to twenty degrees. She and Joe took the frozen food over to Pat's.

When they got back, the freezer had started again. When Mike and I arrived, Joe said it looked like we had come down for nothing. However, the freezer soon quit again. It appeared that a thermal or overload switch had cut out.

We pulled the freezer out from the wall to check the motor and compressor. It was too hot. After it had cooled down enough to run, I plugged it in. I soon saw that a

small fan wasn't running. A couple of blades were stuck on the rim of the housing. The blades were easily bent back to where they wouldn't rub on the rim. Thereafter the freezer worked fine.

We now have finished installing the porch light at the teacherage, and have received a check for the work.

Next week Mike is planning to drive our pickup to Bend to take Henry Blair over there to have his teeth pulled.

This morning the wind came up, and there were some high clouds. The temperature got up to sixty-six about noon. The wind increased in the afternoon, and the temperature dropped to forty-six by three o'clock.

I worked nearly all day in the garden. I brought all the onions and dry beans in, and one row of potatoes.

With the cooler air and the wind, I wore an undershirt and a jacket without being too warm.

At twenty minutes after five I started tuning up the transmitter for my schedule with John. The transmitter wouldn't tune properly. I inspected the antenna, and found one side of the feed line broken. A hurry-up soldering job got me on the air in time to meet the schedule.

The wind died down after six o'clock, and came up again at eight. The temperature was forty degrees.

Last night after going to bed I had trouble going to sleep caused by the arthritic pain in my finger joints, and pain from cracks in the skin at the corner of the finger-nails.

Today I put band-aid strips on my nails. I didn't wash dishes, and kept my hands out of water as much as possible. I cut down on carbohydrates for breakfast.

I dug fifty pounds of potatoes out of another row. I roasted a chicken that had been in the freezer for nearly a year. It turned out very good.

Some bird hunters stopped in asking where the best place was to hunt. They parked out at the point, and will stay there tonight. They have two bird dogs.

Yesterday I put grass in the blender and made juice out of it. I think there is something in grass that helps the body use calcium and proteins better. Anyway my fingers were much better last night.

I made sourdough bread today. It turned out better than the last two tries.

I dug another forty-five pounds of potatoes.

This evening I took off the band aids and washed the dishes. The cracks in my fingers seem to be healing.

One of the bird hunters stopped in while I was putting the bread in the oven. He said that he has been trying to make sourdough bread, but hasn't had much success. His bread generally didn't rise after he put it in the oven.

I had the same experience until tonight. This time it raised some more after I put it in the oven.

Mike worked on the cold room again today. He still has a lot to do go get it sealed tight. He dressed out a pullet and a rooster, and left them whole for roasting.

I talked with Al and Dottie on the radio tonight. The channel was clear of interference.

23rd

The bird hunters left this morning. Mike told them the cabin was available at two dollars a day. One man said that he might bring his wife out yet this fall to stay in the cabin for a while. She writes mystery stories, and usually goes to the beach on vacation and to get inspiration. He is tired of being dragged to the beach.

Mike worked on the cold room getting more insulating and plywood up. I finished digging the spuds.

We went over to Blair's for water, and took the two vacuum cleaners back. While Mike was filling the water jugs, I fixed a light switch for Bessie. We stopped at the teacherage and patched the hole in the plaster at the light switch.

The temperature in the cold room is now eight degrees above outdoor temperature.

24th

We had twelve hundredths of an inch of rain last night that started around three o'clock.

I repaired Mrs. Pendland's electric iron and a light switch. Mike continued working on the cold room.

I went out and started the pickup. The carburetor flooded. I took the top off and examined the float valve. It seemed to be all right, but the gasket appeared as though it may have been out of place. After I put the carburetor back on it worked okay, so the gasket must have been at fault

Schull came up this afternoon. He had some ore samples that he wanted me to test. He thought they should contain nickel and silver.

It tested good for nickel. I have other tests to make. It looks as though there might be cobalt, and maybe gold.

Schull's visit delayed the bread making, so I'm still up at eleven o'clock, waiting for the loaves to rise so I can put them in the oven.

I started building a temperature sensor to put in the cold room so that a meter on the outside will show the temperature. Later I may use it to control the blower that brings in the cold air.

I overhauled the carburetor on the pickup again. The ball in the high-speed jet was stuck. This was the cause of the high consumption of gas.

Sunday, the third, we went down to Don Alexander's mine and got the Koler motor. Don was with us. He was giving the motor to Pat to run the buzz saw.

After getting it set up at Pat's we were unable to start it cranking it by hand. Monday we brought an electric motor with a belt down, and started it with that.

However, when we got the radiator filled with antifreeze, and changed the oil, it didn't run as good as before. After we got the belt onto the saw pulley it started running worse and worse. I got the saw up to high speed, and Mike cut a few pieces of sagebrush. The motor couldn't carry the load. It got worse. We removed the valve cover, and upon cranking saw air bubbles coming up around the head bolts. Yesterday we took off the head to get the gasket for a sample to take to the parts house in Burns so that they could find one for it. Pat is going to Burns this week for grain, and will take the old gasket in with her.

Yesterday I wrote a letter to Mae, and when I was about to address the envelope, I remembered that she had moved, and I didn't have her new address.

I was going to call George to get it, but he called me first. Mary is in the hospital again. She had a heart attack, and will be there about three weeks. George is having

difficulties. He gave me Mae's address this morning not being able to find it last night.

Wednesday, the sixth, we went to Burns and spent forty dollars on a small box of groceries. We couldn't find a head gasket for the Koler motor for Pat.

The cracks in my fingers have healed, and the arthritic condition of the finger joints is better.

We had planted wheat in the planter where the pepper plants are, and it is growing good. I cut some of the blades of wheat, and made grass juice.

Yesterday I got a package from B&F. The UHF tuners were a disappointment. They are tube type and parts are missing. Also the kits for the light-activated controls weren't up to expectations. The Quard latch was missing in one kit. The V.U. meter is okay. The six packs of Polystyrene capacitors will do me for a long time. It looks as though there are different values in the various packs. The mechanism that was supposed to have the shaft off center turned out not to be off centered. It has a cam action with ball bearings held in by a flexible housing.

I went up to the cabin this afternoon. It is in fine shape. There are no signs of mice. Everything is neat inside and outside. Several tomatoes on a bench outside the door haven't frozen.

Mike planted wheat in the old spud patch today.

I called Calderwood's today. Beyrl Hair answered the phone. Jim and Stella are still in Portland where Jim is having treatments for his eye. Beyrl said that channel seven was coming in good, but not channel two.

Yesterday I made a dozen molasses cupcakes. It was a mistake, we ate too many in a short time. There is one left now. We also ate too much of the sourdough bread.

This afternoon I heard John, WA7HKV, tell someone that he was making sourdough bread. I gave him a call. He said that it takes one and a half hours raising time each for the first and second rise. I guess my bread is doing okay. I am planning to let the bread raise a little more next time.

There was fourteen-hundredths of an inch of rain last night. There was a little snow down here and more above the mine. It soon melted. The temperature was forty-three degrees, and a twenty to thirty mile an hour wind seemed cold.

I hiked down the hill to get the mail, and walked back in a snowstorm. I got pretty wet.

There was no package from B&F, but there was a letter from George. Mary was better, but still in the hospital.

Mike cut some willow poles for firewood. It makes a good fire. He is now painting the cold room, and sealing cracks with strips of cloth held in place by the paint.

Tonight I put boiled potatoes in the sourdough starter. I'm keeping the starter in the oven at one-hundred-twenty

degrees. In about an hour I will put it in the refrigerator, and use it tomorrow to make bread.

The whole-wheat muffins that I made today are as crumbly as usual, although I used half white flour.

Last week we went up to the mine and started the compressor and ran it for a short time. It started easily. Before we left I checked the batteries for water, and found one cell dry. Later we checked and found a crack in the side of the battery. We will take it to Ward's order house when we go to town next month.

Pat didn't get the gasket for the Koler engine. If we cant make a gasket, we will take the one-horse-power-electric motor and see if it will run the saw. That will entail running a two-hundred and twenty volt line from the service box out to the saw.

We went down to the teacherage and stopped a leak in the pipe going to the bathroom sink. Then stopped another leak at the valve in the boys urinal at the schoolhouse. Water was coming out where air goes into the valve. By turning down the flow of water to the valve it stopped the leak. However, before doing this we took the valve off and tried to remove the section where the air goes in, but couldn't budge it. Then when we put the valve back in place it wouldn't shut off after being flushed. We took it off again, but couldn't see where we could do it any good, so put it back on.

This time, when Mike turned on the water, I held the valve handle down until a good flow of water came, then let the handle up. The urinal shut off as it should. We tried it several times and it worked okay.

Last week we hauled another load of stored stuff from the old barn at Andrews down to Pat's. She had gone to town the day before and wasn't back yet. Later I learned that she thought we had hauled all the stuff on the first two loads.

While at Andrews Mike showed Marge what to order in Ward's catalog for the service-outlet box that they would need.

I just checked the sourdough starter. It was ready to put in the refrigerator. I put it in a bigger bowl and added some soda. It sure frothed both before and after putting in the soda.

It is snowing out tonight. 21st

Today we went down to Pat's and put a smaller pulley on the electric motor that we had hooked up to the wood saw. On the way we stopped at the old barn and loaded on the refrigerator that been altered to be used as a smoke house, also some coat hangers, and a bumper jack that looked new.

The smaller pulley gave the motor enough power to run the saw. When Mike cut large pieces of wood it would slow down. Since the motor is a constant-speed motor the slowing down might cause it to burn out if the overload switch didn't work. He had to be careful not to overload the saw.

While Mike was sawing wood, I unloaded the refrigerator and other items, then went over to Dora's and Joe's place. We talked and watched TV. Dora put an apple pie in the oven. When Mike came over we had pie and ice cream. Mike had had two pieces of pie over at Pat's already.

It was sixty degrees down at Pat's when we left. It was fifty degrees at our place when we got home.

Davie Wallace came up just before dark. He wouldn't accept any tea or coffee or anything to eat. He stayed until seven-thirty.

The wind blew from the north most of the day. 22nd

The wind blew hard last night, and we had six-hundredths of an inch precipitation. Some of it was snow. The temperature got down to twenty-six degrees.

Going back to Wednesday: - When we tried the electric motor with the eight-inch pulley, the motor didn't get up to its rated speed, although the saw was really traveling. The saw had a four-inch pulley. The motor speed is seven-hundred r.p.m. If it got to full speed the saw would go thirty-five-hundred r.p.m. I don't know how fast this twenty-two-inch saw should go, but it seems a little too fast.

Anyway, with the motor pulley the same size as the one on the saw, it goes fast enough.

Mike is still cutting willows for wood. It makes a hot clean fire.

24th

We cleaned house this morning, spurred on by the fact that Ellis and Shirley were coming down for a visit.

I got two chickens out of the freezer, and had them in the oven stuffed with a dressing that I improvised out of what was available. There were no bread crumbs or crackers on hand. I chopped some onions, mixed them with water, whole-wheat flour, sage, salt and pepper. I was sure it needed something else. I discovered a box of "Seasoned Croutons" that Dottie had left here. These, added to the mixture, made a good stuffing.

Ellis was ready to leave shortly after they got here, but Shirley was agreeable to staying for roast chicken and baked squash, or whatever we had. That was what we had with sourdough bread, and then ice cream with canned strawberries. Shirley said she was delighted with the stuffing.

They left to go home around by Frenchqlen.

I have been trying to modify the circuit in the local oscillator in the receiver so that it will stay on frequency. I put a diode in series with the zener diode in the supply voltage to the oscillator transistor. This boosted the voltage a little which seemed to give a stronger beat frequency with the incoming signal. But the drifting continued. I connected to ground a six-volt capacitor with a zener to boost its voltage-carrying capacity to twelve volts. This takes care of any voltage surges.

So far this capacitor seems to have overcome the drifting, or it may be just temporary conditions.

I've been trying to build a low voltage supply for the temperature control for the cold room, using a small filament transformer.

A difficulty that I ran into was that the voltage would drop down too low with the load. A zener across the voltage draws one-hundred ma. This brought the voltage down to four and two-tenth volts which is too high for the thermistor to properly actuate the thyrister that controlled the motor.

The current through the thermistor lowered the voltage below the working voltage of the zener. Thus all the current that went through the source resistance went through the thermistor.

I started putting diodes in series with the load. Three diodes in series with the thermistor and one in the circuit ahead of the zener gave a very good control voltage of about three volts across the thermistor. This will shut the motor off at about thirty-six degrees F.

Now concerning the receiver:— I put a diode in series with the source voltage to the RF section, and another one in series with the source voltage to the receiver. Then put one in the zener control circuit of the power supply. I doubt that this will help the drift. It probably needs more sophisticated components such as heat—compensated diodes and heat—compensated zeners.

I walked down for the mail, making the round trip in fifty-five minutes, a little better time than usual lately.

I got two letters from Social Security. They want me to apply to the Veterans Administration for benefits for which I may be entitled. They also want a copy of the county tax statement on my home.

I received C. Hamilton's book "Where We Are". It was autographed. He sent my check back. I read the book this evening. It is a very interesting book. It could be a base for philosophical discussions.

We finished the roast chickens today. They sure went fast.

Mike took a day off. He cut a little more willow wood, but for the most of the day he was reading a book.

Mike went down to Pat's and finished cutting all the wood she had ready to cut.

I put a diode in series with the zeners in the power supply of the receiver. It doesn't keep the drift out of the oscillator.

I called the Veterans Administration inquiring about the benefits I might have coming. They are sending me an application form. I also sent the form, I was requested to sign, back to the Social Security office in Ontario along with the statement of our taxes on the dugout.