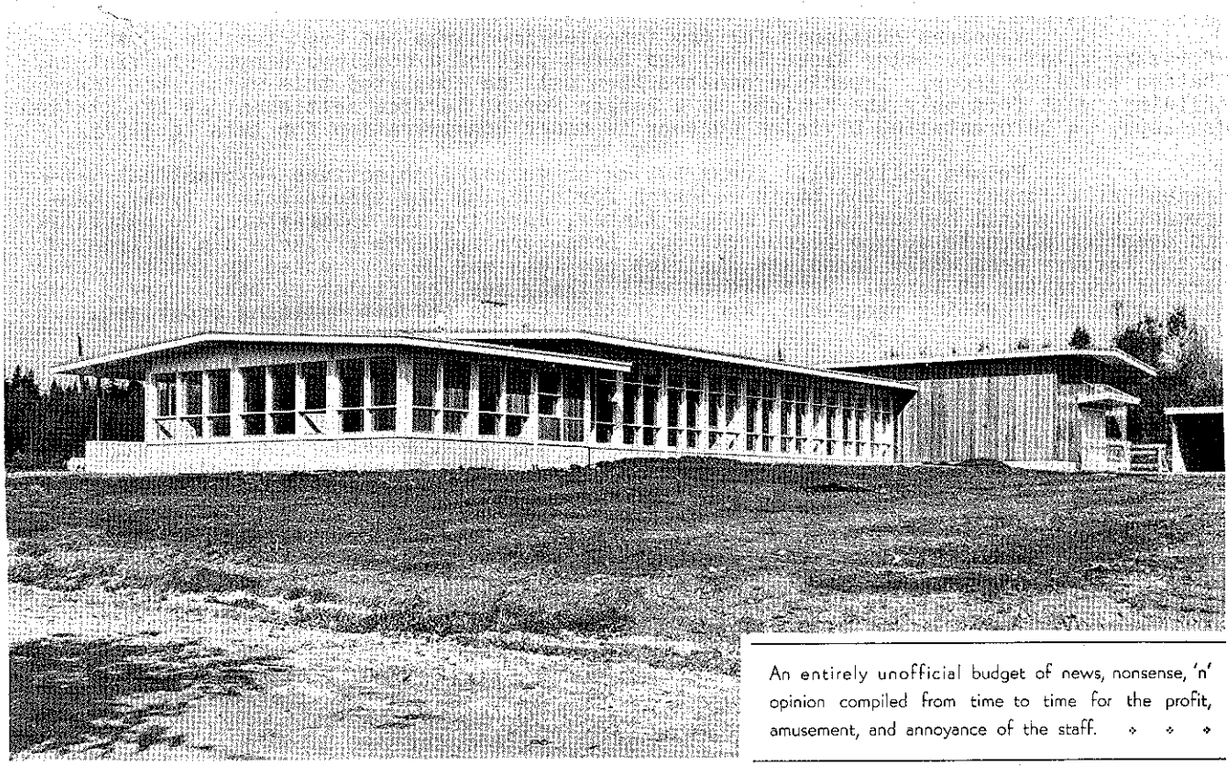
FOREST SERVICE NEWSLETTER



An entirely unofficial budget of news, nonsense, 'n' opinion compiled from time to time for the profit, amusement, and annoyance of the staff. ◆ ◆ ◆

NO. 76 VICTORIA, B. C., NOVEMBER, 1949. 08581.

ALEZA LAKE FOREST EXPERIMENT STATION.

By Larry de Grace.

The original Aleza Lake Station was reserved shortly after the first war, during a surge of interest in Upper Fraser River spruce. In the late twenties and early thirties it became the locale for a considerable amount of research. Names such as Orchard, McKinnon, Barr, Barnes, Griffith, and Garman (to mention only a few of the number seen throughout the old files) have had a hand in its development. Many older foresters, both in and out of the Service, will probably remember, as students, that Aleza Lake was a proving ground for their surveying or trail-cutting skills, as well as being an experiment area for current releases in the mosquito repellent field. The Station was a Y.M.F.T.P. centre during depression days but, except for the occasional visit by bug and fungus specialists, had not figured in Service activity for ten or twelve years. In 1948, Dave Carey used the station as headquarters for the Upper Fraser survey and Bob Malcolm based his compass-and-chain boys here in 1949. At the beginning of the recent season, a forester was placed in charge and a foundation was laid for active management.

The reserve, including a 1944 addition, comprises nearly 28 sections of virgin spruce-balsam. Merchantable volumes average between twelve and fifteen thousand f.b.m. per acre and the stands are characterized by semi all-sized distribution. Management is complicated by two major factors -- the slow establishment of spruce reproduction, and the incidence of butt rot in the older trees. Conversion to a true selection forest may be a long-term objective but, over the next decade, fruitful results will likely derive from on-the-ground demonstrations of a utilization which compromises between best silviculture and the practicality of current logging methods in the district.

During the past summer, old trails were renewed, transit baselines were cut out, and a five per cent cruise carried out as a basis for a preliminary working plan. A series of level lines tied in to prominent topographic features was run to develop comprehensive ground control for a twenty-foot interval aerial-photo contour map. An extension party from the Station investigated tree length logging practice in the Fort George District for three weeks.

Garage, far left, and office-stores building under construction at Aleza Lake Station.

New office and stores building in foreground with residence to right.

Aleza Lake Forest Experiment Station (Continued).

A modern residence for the forester-in-charge has been located on the "forestry site" overlooking Aleza Lake, and forms part of a combined Ranger District and Station building group. Immediate construction will be completed this winter but these buildings will form only the nucleus of a larger Forest Service settlement as the station develops. A Reforestation Division nursery is under consideration for this locality.

Future policy will press two major forestry objectives -- practical management of a forest unit, and basic research for managing the spruce-balsam type. Management will entail harvesting the mature timber, carrying the under-storey to maturity, and securing adequate spruce regeneration. Long-term research projects can be located on the reserve area while immediate district problems may be approached by station-based parties operating at large. Next season will likely see the finish of basic survey work, initiation of a cutting programme, and completion of the present building programme.

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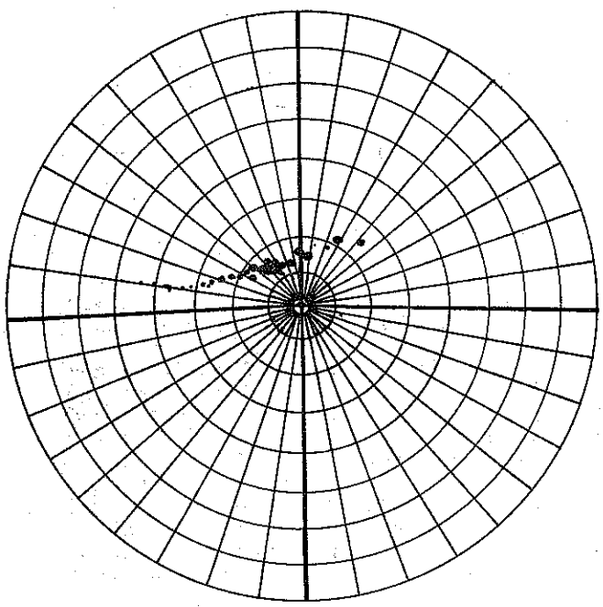
RADAR AND WEATHER.

By D. W. Perrie,
Fire Research & Planning.

Radar "sees" objects by sending out energy in the form of radio waves, and timing the return of the echoes. This is exactly the same principle as the whistling and listening technique employed by the captains of coastal ships in fog. It is also the same principle as that used by the bat for avoiding objects in the dark. However, there is a difference, because radio waves travel so fast that the times are measured in millionths of a second, and thus the timing must be done by electronic means, rather than with a watch such as the ship captain uses. (unless he is up-to-date and has radar) or whatever timing device the bat uses. When radar was first used certain unexplained echoes were seen on the display tube. They interfered rather seriously with detecting the objects the radar was intended to "see". The operators called them "clouds", and blamed them on the weather, particularly the clouds It became advisable to do something about learning more of the causes of these echoes. In Canada, the task was undertaken by the Canadian Army Operational Research Group. The writer was, for a time, attached to this organization to assist in the investigation, and was in charge of one of the experimental stations.



This is the display tube used in the experiments described. It is known as a "Plan Positions Indicator" , and has bearing lines at intervals of ten degrees of azimuth, and lines at 20-mile intervals to indicate distances from the radar. The irregularly shaped spots are rain echoes.

It was found that the echoes were caused by rain and snow, and that, in general, a cloud which was not raining or snowing would not show on the radar. There are a few special exceptions, but space here is not sufficient to deal with them. The reason, briefly, why rain will show and most clouds will not, is that the size of the drops is of very great importance, and the drops of rain are bigger than those in clouds. As a matter of fact, the drops of drizzle are too small to show on the radar. At first, we telephoned persons who were located at places where we knew echoes to be originating This enabled us to learn that it was raining at the echo sources, and that the edges of the echoes and the edges of the rain were the same places. But these "local observers" could not tell us how hard it was raining, and this was important. So we developed a scheme of intercepting the echoes with a radio-equipped motor vehicle. To measure the rain, we used pieces of filter paper with a dye which would show the drops as blue spots. From data collected in a separate laboratory experiment, we were able to determine the number and sizes of the drops from the spots on the filter papers. The filter papers were exposed to the rain for a very few seconds. Rain gauges were also used. To record the echoes themselves, we used a 16 mm. camera, which took photographs of the display tube. The films were projected for study. In this way, we learned just how much rain is needed to cause an echo.

A number of very useful applications of radar storm detection have been developed. In the United States, radar is used to detect storms, and is of very particular value for tracking hurricanes. In detecting rain, radar may be considered to be much the same as having an extremely large number of observers extremely close together.

The Defense Research Board has, in the years since they took over the project, developed means of measuring the power of the returning echo accurately enough to know how hard it is raining where the echo originates.

Fog causes no echo on radar, and this is very fortunate, as it makes radar exceedingly useful in foggy weather to both aircraft and ships. A very useful radar system for aiding aircraft when they must land under conditions of fog or low cloud is known as "Ground Controlled Approach" or simply as "GCA".

Radar will not forecast rain, but with the aid of suitable equipment of this type a forecaster can know exactly where and when it is raining and can follow the

Radar and Weather (Continued).

behaviour of the rain from minute to minute.

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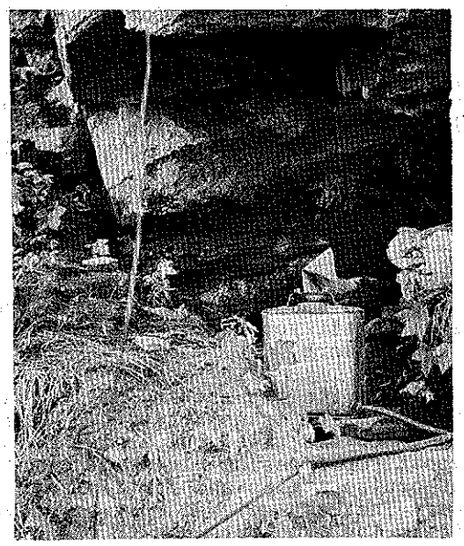
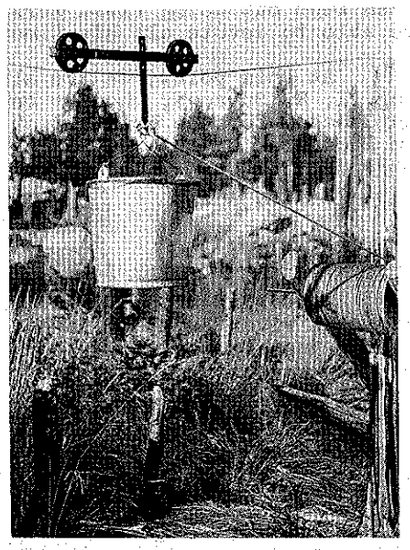
RUBE GOLDBERG SLEPT HERE?

If the Service was to claim that the fabulous "idea-man", Rube Goldberg, had at one time served in the Grand Forks Ranger District, such a claim would be well substantiated by the existence of the Morrisey Lookout water trolley line.

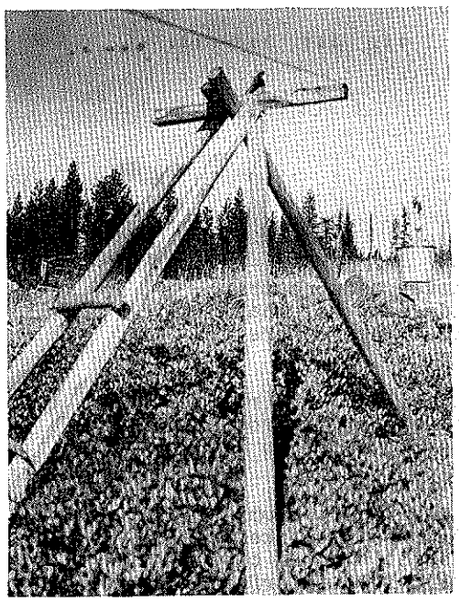
In coming out of the clouds and down to cold statistics, however, we find that Ranger Emerson Reid, of Grand Forks, designed and constructed this amazing contraption in September, 1942, at a total cost of approximately $8.00. Since that time the trolley line has served faithfully and efficiently each season. Its total length is 275 yards and the water is delivered at the top windlass only 125 yards from the lookout cabin -- about a two minute walk.



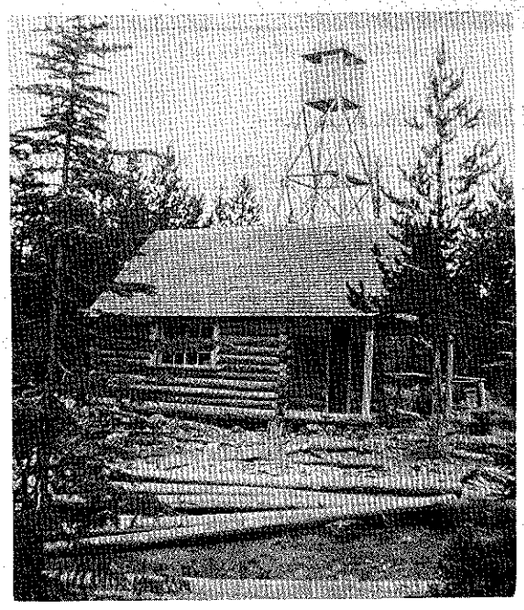
1. Water drips onto a sheet of galvanized iron which is tilted to drain into an old back pump tank. Then water is piped 28' where it drips into the pail at the bottom end of the trolley cable.



2. The carrier pail with wire mesh cover to keep out leaves etc., and the windlass containing 275 yards of ¼" rope. It requires approximately 6 minutes to lower pail down to water source and 9 minutes to bring full pail back to the top. The windlass is 2 minute walk from lookout cabin.



3. The full pail passing over the last bracket and on its way to the windlass.



4. Morrisey Lookout tower and cabin built in 1939. Tower is 50 feet high. Cabin 14' x 16' with 6' roof projection. Cost $1150.

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FOREST ECONOMICS.

From Here to There.

This month, we are bidding good-bye to two of our past Survey Party Chiefs -- Davis M. Carey and Wally G. Hughes. They are both transferring to Management.

Davis has had varied experience in Economics, starting as compassman and going through the mill, including several years of reforestation experience, Party Chief on the E. and N. Survey, and finally getting the Prince George Forest Survey off to a good start. This survey was turned over to R. M. Malcolm this past summer. We understand Davis will be working with Cedric Telford in connection with the management of our various forests, beginning with the Sayward Forest.

Wally Hughes has also gone through the mill, beginning as compassman and, for the past three summers, has been in charge of one of our two forest survey boat parties. Wally handled the Quadra Island survey, started the North Coast one, finished Smith Inlet, and wound up this summer by starting the revision of the Sechelt Forest. For the past year, however, Wally has become more and more interested in Farm Woodlots and has even been out doing field work on them. This transfer to Management means that he will be able to devote all his time to farm woodlots.

At this point, we are also losing one of this summer's crop of Foresters-in-Training, I. R. Burrows, who has been working in our office for the past month. Ivor has already headed for the Prince George District Office. How are you finding the snow, Ivor? Jim Pickford, of our draughting staff, has transferred to Management to work under A. E. (John) Collins.

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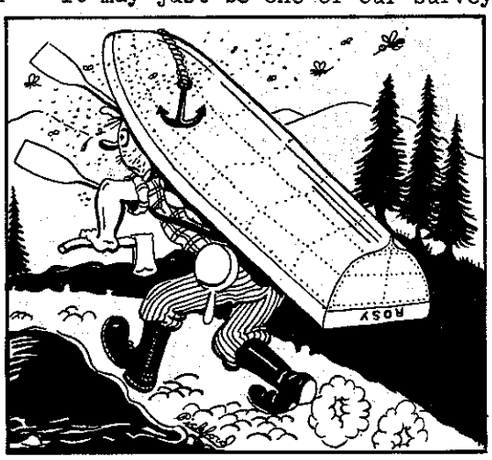
Landcrabs and Rowboats.

Speaking of boats, if you are walking along and suddenly see a giant land crab appear on a river bank, don't discharge your firearms until you have had a second look -- it may just be one of our survey compassmen going to work.



A Landcrab or.....?

Despite the sketch, this is a very credible means of transportation. This summer, Forest Surveys tried out a nine foot, plywood rowboat for crossing rivers to reach the start of cruise strips and for fishing in alpine lakes. The boat weighed only seventy-three pounds so the procedure was to tie a packboard to the centre boat seat, stand the boat on its stern, slip into the packboard straps, and walk away with the boat on one's back.

Unfortunately, no movie camera was available to catch Mickey Pogue as he dashed madly around the Princeton-Merritt survey party's baseball diamond with the boat on his back while evolving this system.

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A Letter to the Editor.

The Editor, Forest Service Newsletter,
Parliament Buildings,
Victoria, B. C.

Dear Sir:

Its a libel, that's what it is! I never made no trip to Fernie to fit no Fords in no garage -- standard or no, that is, so far as I remember! George Schupe was the ranger there, I think, and Norman Moore was District Forester.

But the garage was a special concession, and as I remember it (don't look up the file) my part was in seeing that the roof was high enough to allow for storage of the dozen or so tools in the district.

This was done, and I received many compliments from visiting firemen on the extra space which allowed those who liked their golf en cube, to get off an earthen floor and shoot a round on some nice pine boards where Fords and Armstrong bulldozers interfered not.

And 18 x 20 was quite some building in them there days. Three hundred and sixty square feet of floor space -- just three hundred and sixty feet more than existed in any other district. Indeed, as I faintly remember, applicants for ranger positions received marks on the oral examination form in sufficient quantity to receive Grade A if they brought not only experience and training to the job, but also a garage and storage shed.

Twenty-nine years ago -- how we love to tell tales that lose not in the telling. But Mr. Editor, the story as reported in your last issue just ain't so.

Yours very truly,

C.S. Cowan, Chief Fire Warden,
Washington Forest Fire Ass'n.

NELSON NEWS.

Arrowhead Dispatch.

We are still battling bad weather in order to get all our project work completed before the annual freeze-up. Arrowhead Ranger Station is getting some work done, such as fencing and a rock wall that has the locals wondering where we get all the flat rocks. Result is that flat rocks of any size are at a premium for miles any side of Arrowhead. We are hoping to get a lot more landscaping done before the snow stops everything.

The new boat house at Trout Lake has been completed and Asst. Ranger K. Kast is now the envy of all boat owners who operate on that lake.

The District was recently honoured by the visit of J. Applewhaite and cruising crew who, while accomplishing a good volume of work for us, also brought his bagpipes along with him. Residents of the town were treated (?) to a few tunes and it was thought (and hoped) that bagpipes would not work in wet weather, but such was not the case. John's playing at the start of the goose shooting season also frightened those wary birds so badly that it has been next to impossible to get near one since. We were wondering if we could possibly persuade John to get on some of the higher mountain tops and frighten some of the game down to the lower levels with a few well-placed notes.

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Advice to Compassmen.

In the 17th Century, William Gilbert, of Colchester, England, proved that a steersman with garlic on his breath would not necessarily deflect a delicate compass needle. Gilbert tried "breathing and belching" garlic on the needle himself, and could "observe almost not the least difference".

-------Time Magazine.

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The Local Scene.

Irwin Johnson was forced to "pass the buck" to Bill Wicken. (Brooklyn lost!)

Glad to see Lawrence Ott, radio man, back to work after a session of pneumonia.

Rangers J. H. Applewhaite and Tippie have also been on the sick list. We wish them a quick recovery.

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Hatched.

To (Assistant Ranger) Gilbert and Jean Cartwright, Invermere, a 7 lb.7 oz. Son, Alan Maxwell, on September 4.

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Matched.

Margaret Klein, stenographer, became the bride of Ronald Wagner of Burstall, Saskatchewan. After a honeymoon in Toronto and Niagara Falls, they will make their home in Burstall. (Married September 19.)

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Juanita (Dolly) Smiley was married, on September 2, to F. G. (Fritz) Koehle. They are living in Nelson, where Fritz plays hockey for the Nelson Mapleleafs.

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"Powerhouse" Forse.

Over half of the Government Bowling League this year is made up of Forest Service personnel. Howard Taylor and A. E. Collins of Victoria were spares during their visit to the Nelson Office.

H. B. Forse, our District Forester, a couple of Fridays ago had seven strikes in a row, ending up with a 320 game. This startling information is to frighten Victoria prior to the annual bowling competition between the two leagues.

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The Missionaries.

Peace and quiet is again reigning in this District after the complete disruption visited upon the usually well-oiled machinery during the first half of September. It all started when a certain individual,a wild-eyedand madly-veering Fargo pickup, and two ominous-looking wooden crates overcame The Monashee and plunged into our midst. It was Fall Fair time again and, to P.R. & E.,that means just one thing -- EXHIBITS!

In a span of a few weeks, displays sprang into existence at Invermere, Elko, Rossland, Nelson, and Creston and the public was invited in press and on the air to come and see for themselves and hear the words of wisdom delivered by those forest officers in attendance.

Now that our collective flat feet once again have arches, we can look back

The Missionaries (Continued).

upon the whole show in a kinder light.

At the Rossland Fair, George Graham explains the finer points while Bill Uphill's right ear shows smartly over the "customer's" shoulder. The individual on the right appears to be sagging badly.

The Nelson "show" from where broadcasts were made over CKLN while Chuck Wilson power-dived the Junkers overhead.

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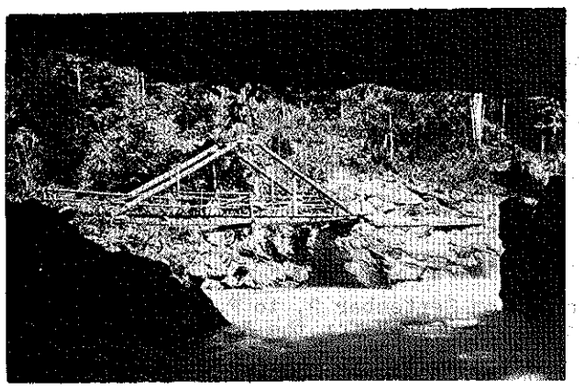
KAMLOOPS DISTRICT.

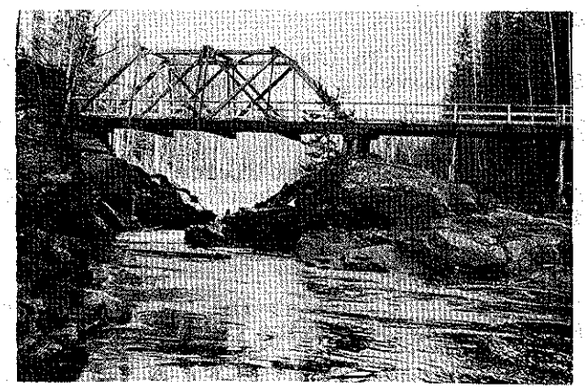
Murtle River Bridge.

After a rather late start, the Murtle River Bridge, in Wells Gray Park, was completed on October 29. Engineers McGowan and Bailey, of the Parks Division, designed the bridge in the spring and Bailey remained to superintend construction. A local crew was used and a small local sawmill put out all the timbers and lumber except for seven 62-foot stringers which were hewn 14 inches square by the local crew.

The centre span is 62 feet and the bridge has a clearance of 12 feet. There is approximately 40 MBM of wood in the bridge and approach. The bridge is the initial step towards park development and better access for forest protection purposes.



The old bridge, before being condemned and dismantled.



The new bridge, designed by McGowan and Bailey and completed in October, 1949.

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Movies Provided for Lookoutman.

This spring, an open air drive-in theatre was constructed at Penticton and the screen faces directly towards Campbell Mountain Lookout. During the idle evening hours, the Lookoutman is able to see the movie. Of course, he must use binoculars and the set-up lacks sound.

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Harry Fewtrell, who has been Assistant Ranger at Penticton for a number of years, entered the B. C. Police Force as of November 1.

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W. W. (Pat) Stevens has been getting about with the use of a borrowed cane. He reports that, while taking an evening stroll, a truck rounded a corner with a 30-foot chain dangling. The chain whipped and the end caught him at the ankles. Fortunately, nothing more than severe bruises was the doctor's diagnosis.

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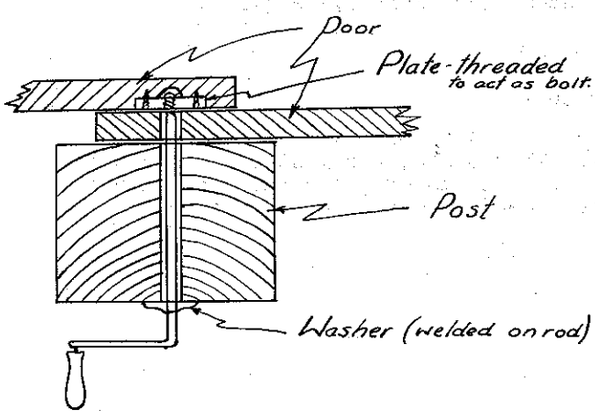
Kamloops District (Continued).

Fool-and-Rattle-Proof Lock.



For some time we have had difficulties in fastening securely the doors on our four-car garages. Mr. Odland, a contractor from Oliver who has constructed several buildings for us produced a simple device that is fool-proof and keeps the doors from rattling in the wind. The attached sketch is self-explanatory.

So far two improvements have been suggested. First, a sliding bolt on the plate would allow for settling of the building or shrinkage and swell. The other suggestion was to put on a spring arrangement to eject the bolt far enough to clear the doors and thereby eliminate any possibility of scruffing the doors.

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Osborne Victor Maude-Roxby, former Assistant Ranger died on October 25 at the age of 55. He was Assistant Ranger at Kelowna from 1931 until 1938. From 1938 to 1940, he was supervisor of Y.F.T.P. and N.F.P. crews. In July, 1940, Mr. Maude-Roxby enlisted in the army. He had previously served in the First Great War, attained the rank of Captain and was awarded the M.C. In the second war he attained the rank of Lieutenant-Colonel and received the O.B.E. After returning from the army in 1946, he was employed by the Department of Municipal Affairs at Kelowna. While in the course of his duties, he was stricken with a heart seizure.

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VANCOUVER DISTRICT.

Receives D.F.C.

At Vancouver, on October 22, 1949, an investiture was held at which 122 of "the best" were decorated. Assistant Forester Eric Bennett resumed his uniform for the occasion, and received the Distinguished Flying Cross.

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"Eagle Eye" Lorentsen.

Acting Ranger Lorentsen, who makes his headquarters at Chatham Channel, has shot three cougars which prowled quite close to his residence. Inspection of the brutes' stomachs showed them to be empty with exception of a small amount of fern, and all the animals were quite thin. The local game warden advanced the opinion that these cougars were suffering from an eye infection which lessened their hunting powers, and hunger drove them to prey on domesticated stock, or even to attack human beings. Lorentsen shot the predators with a .22 rifle, and has now been supplied with a 30.30.

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From Thither and Yon.

Another whisper of news from the usually silent north is that Ranger Charlie Langstroth, of Alert Bay, cracked a couple of ribs and will be out of the line-up for a brief spell.....Ranger Jimmy Robinson, with Mrs. Robinson and son, moved into their new house on the hill at Mission. Intending visitors in overalls will be provided with a shovel if time permits so that they may do a bit of digging, or levelling, in what is to be "The 1950 Garden". Graduate engineers are to be allowed to build rockeries from stone which they may pick up on the premises.....From Langford we hear that Bert Bodman, who suffered a fractured ankle while pursuing his duties last September, has hung up his crutches, dispensed with the cast, and is travelling around in the woods once more, a little gingerly perhaps -- but travelling. Ranger Jack Greenhouse, of the same Station, has also been on the sick list. He followed his assistant to the hospital with a double hernia and we are happy to say is convalescing satisfactorily after the operation..... Aph Bully has returned to work in the scaling office after a successful appendectomy..... A well-attended roller-skating party was held by younger members of the District Office staff during October. Mr. Eric Ferguson stole the show in much the same way that Mr. Pickwick distinguished himself some years ago. Casualties were all of a minor nature and were treated on the spot by a little gentle rubbing. There is to be a repeat performance.

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Good Luck to the Youngs.

As forecast exclusively in these columns last month, Mr. Ted Young said "I do" on October 29. In the absence of the District Forester, a pre-nuptial presentation of a tri-lite table lamp was very happily performed by Mr. D. B. Taylor on behalf of the office staff.

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Welcome.

We welcome to our ranks, Joan K. Coy, comptometer operator, all the way from Australia, and John Ronald MacInnes, Junior Clerk.

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Vancouver District (Continued).

A Girl.

Our concluding paragraph is a bright little spot of news about a previous employee Velma Thornley, "To Mr. and Mrs. R. Middleton (nee Thornley) a girl".

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OUR MASTHEAD STORY.

The October issue of the Newsletter carried the story of the official opening of the new Ranger School at Green Timbers. This month, our masthead shows the scene of the ceremonies -- the main school building. This modernistic building contains the administration offices, the classroom, and the model tool cache and workshop.

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