



Charles Epling	Clearwate
Carl Pease	Headquarter
Roger Carlson	Rutledg

Ever Question Free Enterprise?

 If there are any left that have any doubt as to the advantages of the American system of Free Enterprise, they should read the letters penned by Richard S. Clark, United Press correspondent, who writes from Russia-dominated Poland.

Clark points out than an average construction worker receives \$30 per month. This is less than the average family receives from the United States government when retired on Social Security.

But if prices were proportionately low there might be some excuse for these conditions. Instead, prices are four to ten times higher in Warsaw than they are in the United States. Look at these for example:

Coffee and cream, per cup\$.50 Women's shoes with wooden

soles	
Women's shoes	
Working man's su	it

Women's dress material, per yd. 10.00 Gasoline, per gallon .80

In addition to this, Clark points out that no Polish peasant is allowed to own more than 125 acres of land and that amount may be decreased.

Behind these difficulties lies fearfear of the secret police whose dreaded initials are UB and which are referred to in private conversation as Bread Units to escape unnecessary attention. THE FAMILY TREE

VH

TEN YEARS AGO IN THE TREE

Winding up the 1939 "Low water" cedar pole drive in the North Fork of the Clearwater River, Joe Parker and his crew were in the vicinity of Big Riffle, about 13 miles above Ahsahka, as the last week of July drew to a close.

Headquarters was the scene of much activity over the weekend of July 22 when 210 normal school students and faculty members arrived on a special train. Hiking and lunch provided the day's activities. The following day about 100 members of the Clearwater Foremen's Council and their families made a similar excursion.

It was with not a little satisfaction that the following letter was sent out on July 12 to the res-idents of Potlatch: "We are pleased to announce that the new well has been turned on the city water line and that the supply of water is now sufficient to permit necessary sprinkling of lawns and gardens in Potlatch. We take this means to thank each and every one of you for your splendid cooperation in the past when a water shortage in Potlatch could have resulted very disastrously. We trust our water problem is solved for a long time to come."

Served with a dinner that would have taxed the chefs of the Davenport Hotel, approximately 100 members of the Potlatch Foremen's Council and their wives, held a gettogether at Camp 33 Saturday evening, July 29.

On Monday night, July 10, Mr. Rettig called a meeting for all Clearwater woods foremen and clerks at Camp 25. He presented Mr. Black of the Workmen's Compensation Exchange of Coeur d' Alene, who told how much and why Potlatch Forests, Inc., needs a sound safety program up in the woods.

The Clearwater Plant, during the first half of 1939 had the best safety record in its history for a like period. Next to the long run of 564,130 man-hours without a lost time accident, which last summer was spread over parts of two halfyear periods, the first six months of the year stand out as a real accomplishment.

Recognition by their fellowmen



COVER PICTURE

The dramatic shot used for the cover of this issue shows the opening into which logs are conveyed from the pond to the new Veneer Plant at Clearwate. The log in the foreground was the first log to enter the plant and marks the further packaging of varieties of wood products from a single plant. These logs are destined for the barker and thence to the lathe. Flitches or cants for processing on the slicer will travel or an endless belt from the headrigs in the sawmill.

in business and professional life has come to two residents of Potlatch in a way that has made them both outstanding in the state of Idaho. Dr. F. C. Gibson has just completed a term as president of the Idaho State Medical Association, and Mr. George P. Anderson is entering upon a year of presidency of the Idaho State Banker's Association.



Model: "The artist I pose for does painting, etching and sculpturing."

Friend: "But, of course, he does one thing better than anything else?"

Model: "Til say. But he's pretty good at painting, etching and sculpturing."



First veneer log making its way out of the pond.

Veneer Plant Begins

Monday, July 5, marked another stepping stone in the history of Potlatch Forests, Inc., for it was on this day that the first peeler log found its way into the new Veneer Plant at Clearwater.

Exactly at 8 a. m. the superintendent and all others who had a hand in the construction of the new venture were out on the log deck in the pond with like poles and other equipment helping that first log get its start. There was little fanfare except a photographer snapping pictures to record pictorially the first log in the annals of new products for the company. Number one log cruised overhead on

Number one log cruised overhead on the chain conveyer similar to those used in automobile factories for conveying engines, bodies and many other parts on production assembly lines. It consists of a series of trollies with antifriction roller bearings.

Log Barker

Into the building through a large opening there appears a huge machine called the log barker. It is the first machine in the production line. The log was let down from the log carrier by means of two hoists, similar in principle to heavy duty lift trucks, to the spindles of the barker. This machine employs two methods of barking a log. One is the use of a rosser head and is used extensively on the Coast. The other or newer method, is termed "compression barking," wherein the log is rotated between the spindles of the barking matime in the same manner as with the rosser head except that in place of this older head a roller mounted on the end of a piston rod of an air cylinder forces the roller against the bark of the log as is is rotated, thus squeezing and shearing the bark from the log. This method

THE FAMILY TREE

is relatively new and at present only a few mills have changed over from the old type.

At the completion of the barking process the log was lowered to a chain which conveys it to the next production machine—the veneer lathe. This is the most important production machine in the plant and is of the latest design for fast and accurate cutting. It is steam driven through a two-speed magnetic clutch drive. The veneers cut on this lathe may vary in thickness from 1/30 to 1/4 of an inch and in lengths of 60 to 102 inches. The maximum diameter log that may be cut is 60 inches.

The method of handling veneers away from the lathe is distinctly new and to our knowledge this is the first plant in the West using the reeling system. When the veneer is peeled from the log the sheet is wound on a reel and in a total length which will build up the reel to an approximate diameter of 30 inches. The reel is detached from the reeling mechanism and stored on a horizontal rack until its use is needed.

In the production of veneer on a lathe several different types of veneer is produced plus the waste. It was, therefor necessary to divert these different types through the desired channels of processing. To accomplish this a device termed a "tipple" is used at the lathe and is installed in such a manner so that all veneer cut on the lathe passes over this device and the product can be distributed into four separate outlets for further processing. The veneer retriever is a machine recently developed to recover veneer from "fish tails." These "fish tails" are short pieces of veneer which come off the lathe first and result from the log being larger on one end than on the other. They will vary in width from a few inches to the full length of the log. Prior to the development of this machine these "fish tails" went to the hog as waste. It is the combination high speed gang trimmer and clipper and is entirely operated from a central keyboard control.

Next in the production line are the clippers. These machines cut a continuous sheet of veneer into standard widths and for cutting out defects or selection of grades in the veneer. The clippers may be three different types automatic, semi-automatic and manually controlled. There are two decks which follow the lathe operation. The upper deck provides space for the reeling and unreeling system and the automatic clipper. The lower deck provides space for a veneer storage transfer table and a semi-automatic clipper.

Next in line comes the green chain where the veneer is separated and piled on trucks for transfer to the dryers. The gang saw which recovers lumber out of the core left from the lathe; the dryers and dry grading tables and the veneer patching, jointing and edge gluing machines. The handling of the material is done by fork and lift trucks except the handling of veneers from the

(Continued on page 7)

Headquarters Community Hall

The scene below is an artist's conception of how the new Community Hall for Headquarters will appear. The plans are complete and the site has been selected, thus, all that is left is the construction. The building will be 50×100 feet with a 16 x 28 foot entrance. Its capacity for seating will approximate 600. It will be a ribbed arched rafter type of building made of curved laminated pieces. The roof will be finished in corrugated aluminum roofing in 100-foot strips. The conversion possibilities to different types of recreation include basket for basketball, roller skating, dancing, volley ball, facilities for using part of the building for small parties and many other advantages. It will be heated by a central heating unit utilizing hot air and insulated in the inside walls. The location, according to the engineers, is in the meadow northwest of warehouse.



Page 4

Billings Lookout Dedicated

Formerly Summit Lookout, a timberstrewn peak looking out over the more than 300,000 acres of the Clearwater Tree Farm and spotting the town of Headquarters and the CTPA headquarters has been formally renamed BILL-INGS LOOKOUT.

Idaho dignitaries headed by Governor C. A. Robins, and officials of CTPA, PFI and members of the family of the late C. L. Billings gathered atop this 4.200 foot mountain July 10th to dedicate the point in honor of the man who did so much to preserve Idaho's vast timberlands. It is a tribute in granite and bronze to the pioneer of forestry management in northern Idaho.

Dedication By Governor

Governor C. A. Robins gave the dedicatory address. He stressed the foresight and strength of Mr. Billings' belief in the need for a long range program for timber preservation. The stone is located at the base of the 100 foot lookout tower and the plaque is inscribed, "Dedicated to the man who first practiced the cropping of private timber in Idaho."

Otto H. Leuschel, PFI general manager, gave a few personal remarks about Mr. Billings. "Tree farms are a permanent monument to his memory," stated Mr. Leuschel. "He was a human being and as such subject to human frailties as well as all of us. But because he was a human being, we will revere his memory and hope to carry on his ideas as he would have us do."

The program was opened by A. B. (Bert) Curtis, chief fire warden for CTPA and PTPA, and introduced E. C. Rettig who acted as master of ceremonies. The invocation and benediction was given by the Rev. Fr. Michael Mulvahill of Orofino.

The dedication opened a four-day tour of north Idaho forests by the State Land Board, including a two-day trip down the North Fork of the Clearwater River.

Blister Rust

On Monday, July 11, the State Land Board were shown the effects of blister rust in the Clearwater area and were told of the program underway to curb this scourge of white pine trees. The morning program was under the direction of Herman Swanson, Spokane, senior entomologist for the Bureau of Entomology and Plant Quarantine, and included a lecture at the blister rust headquarters at Pierce and on the actual workings of the control program.

Following lunch the group was taken to Camp 14 by way of Camp 60. At the Camp 60 landing, Royce Cox, PFI forester, outlined logging practices employed by the company. After dinner at Camp 14 the party moved on to the mouth of Beaver Creek on the North Fork of the Clearwater.

Cruising Down The River

After spending the night out in the open, the party boarded two 40-foot rubber boats for the 60 mile trip down the rough and turbulent North Fork to Elk creek. Enroute party members inspected burned timberlands, fluming operations of PFI and timber stands.

On the first day the party beached at Land Board bar and within a few minutes a plane flew over and dropped lunches by parachute. Following lunch the group proceeded to the mouth of the Little North Fork of the Clearwater. They were met there by Curtis and his

The Land Board and guests at the start of the sixty-mile river trip.





The granite monument in honor of C. L. Eslings. Clockwise, Mrs. Dexter Fairbanks, Dester Fairbanks, Robert Billings, Rick Billing and Mrs. Billings.



A scene at Land Board Bar showing Ed Gaffney, Jim O'Connell and Bob Werner, and the rubber rafts used for transportation.

assistant, George Hjort, who trucket the party to Boehls cabin for the night. The following morning the crew remounted the boats and after a long day journey arrived at Elk Creek, near Dent Idaho. As experienced the first day the same plane flew over and dropped lunches at a point about a mile above Big Island.

The party was met at Elk Creek by Curtis and Hjort who escorted the group to Camp Y for supper thence to Elk River for the night. The next day the timber holdings of the Diamond Match company were inspected following which the party adjourned.

Night baseball is talked of as beint a new wrinkle. According to Jocko Maxwell Woodside, New York fan. the first night baseball game was played on June 2, 1883, in Fort Wayne, Indiana Over 2,000 fans saw the game.

A couple of telephone linemen were climbing a pole when the woman motorist drove by. "Look at those morons," she sniffed. "Just because Tvt had a couple of accidents, everybody in town is trying to be funny."

Custom Officer -- "Anything to declare madam?"

Lady-"No, not a thing."

Custom Officer-"Then am I to understand Madam, that the fur tail hanging down from under your coat is your own?"



Bovill Trucks — Man Size

What was cabless war surplus Mack trucks eight months ago has now been converted into a fleet of modern loggers that makes ordinary trucks appear as midgets.

Last fall fifteen Mack Army model 1N08D, seven and a half ton, 6 by 6 prime mover trucks were purchased from the Stone Truck and Equipment Sales Company and transported by rail to the Bovill shops. Earl Ritzheimer, Bovill superintendent, and his crew at the shops set to work. They have completely rebuilt the trucks for logging use including a repaint job.

The specifications include a SW 32 rear end, EY 707A engine with a 707 cubic inch motor, and a TDR8-13 transmission. The new cabs were made by the Novelty Carriage Company of Spokane. It is equipped with eighteen 1200 by 24 16-ply tires and drags a Porter-

The woman had only one fault to find with her maid. The girl ignored the telephone when it rang.

"You must answer the telephone, Clarisse," she told the maid in exasperation.

"Yes'm," replied the girl glumly, "seems kind of silly, though. Nine times out of ten, it's for you."

"Senator, you promised me a job." "But there are no jobs open."

"Well, you said you'd give me one."

"Tell you what I'll do: I'll appoint a commission to investigate why there are no jobs and you can work on that." Willamette trailer with dual axles, each of which has a 25,000 pound carrying capacity.

unit.

month you desire.

These trucks are at present doing the job of getting the logs to the railhead. Ten of them are on an eighteen mile haul from Camp 40 to Clarkia and five are hauling from Camp 44 near Avery on a six-mile run. At a restaurant an elderly wolf had made several sly but futile attempts to flirt with the pretty young waitress who was serving him. Finally, when she brought his dessert, he grew a little more bold. "My dear," he purred, "where have you been all my life?" "Well, chirruped the girl matter-of-factly, "for the first forty years anyway. I probably wasn't born."

Morning line-up at Clearwater fuel office.

Order Your Fuel Now!! Do you remember what happened to you last winter, the winter before and the winter before that? The demand for logs has each year become greater and greater because more

Don't let yourself get in the position of arriving home at 3 a.m. from work and arising early enough to make the line up as shown in the picture above, to get your quarter

You can avoid this unpleasantness by acting now. Call your fuel department and order your winter's supply of

Pres-to-logs while the supply is ample. You can have them delivered to your home in one or more unit lots during any

and more people have converted to the magic fuel.

Nettie—"Don't let the people know that we've just been married." Eddie—"Okeh! You read a book and I'll go talk to the blonde over in Section 7."

The completed fleet of fifteen Mack logging trucks for the Bovill side.



THE FAMILY TREE

Frank Yandell, Potlatch, Saves Life of Fellow Worker

The fast thinking of Frank Yandell, Potlatch Unit, and his knowledge and training in first aid, was the direct result of saving the life of Henry Ulinder.

Page 6

About 3:50 Wednesday afternoon, July 13th, Alvin Warner, grinderman at the Pres-to-logs plant, was having difficulty in breaking down the fuel in the fuel vault. Ulinder came to his assistance and when the stoppage was cleared a cascade of fuel threw both men into the loose sawdust. Warner managed to work his way out and call for help.

According to witnesses Ulinder had stopped breathing. Immediately Joe Stone, safety director, be-gan removing the hog fuel and sawdust from his mouth and Yandell gave artificial respiration. Ulinder was breathing by the time the doctor arrived and had regained consciousness soon after being taken to the doctor's office. After spending the night at the Gritman hospital in Moscow Ulinder returned to Potlatch and was back on the job the 15th.

He was literally buried alive be-tween 10 and 12 minutes, which was the time necessary to dig him out from under the fuel.

This clearly shows the value of first aid training. This training has been stressed at the Potlatch Unit and it is more apparent now that all employees should qualify and carry first aid cards. Mr. Yandell has an advanced first aid card and received his training under Stone.

WOMAN-A creature who can weave through a grocery aisle eighteen inches wide without brushing a single balanced to-mato can, and then drive home and knock both doors off a fifteen-foot garage.

N-A guy who can spot a trim ankle three blocks away while driving down a busy street at high noon, but won't notice, in wide open country, a whistling locomo-tive the size of a schoolhouse. MAN

First Kangaroo: "Annabelle, where's the baby

Second Kangaroo: "My goodness, I've had my pocket picked."

Trying to rest after an exceedingly hard day at the office, poor father was being be-deviled by a stream of unanswerable ques-tions from little Willle. "What do you do down at the office?" the youngster finally asked. "Nothing," shouted the father. After a thoughful pause, Willie inquired, "Pop, how do you know when you're through?"

The only thing that will positively stop falling hair is the floor.



Potlatch Bovill Trucks Man Sized

Among the graduates of the University of Idaho in the class on 1949 was Vernon L. Young, son of Mr. and Mrs. L. H. Young, Vernon graduated from Potlatch High School and worked at the Potlatch Plant during his vacations. He served three years in the 81st Division of the Army Air Corps, most of which was in New Guinea and Australia. Vernon and his wife left on June 8th for Schenectady, New York, where he has a position with the General Electric company.

The wives of the Potlatch Foremen's group were invited to their last meeting which included a dinner. Following the dinner J. J. O'Connell, unit manager, expressed his appreciation for the co-operation he had received from the group. Entertainment and dancing followed. Guests were Mr. and Mrs. John Shephard and Mr. and Mrs. E. L. Terlson of Lewiston.

The weeds around the plant have been a problem for many years. It is necessary to keep these weeds down to reduce fire hazards,

Every remedy in the world has been tried—men with scythes and hoes, and more recently 24D was applied with a hand spray. This involved a lot of hand spray. This involved a hard work and little coverage.

Last year a 3 hp garden tractor was purchased and used for cutting weeds

Through the efforts and and grass. ingenuity of Art Sundberg a thirty-gal-lon tank was mounted on a two-wheeled trailer and from the power take-off a centrifugal driven pump with a presure of 30 pounds was installed. The mixture used in the spray consists of three gallons of 24D and ten gallons of diesel oil to thirty-seven gallons of water. This has greatly increased the efficiency of the weed killers.

A A. McDonald, manager of the Pot-latch Mercantile from its beginning until 1926, was a visitor here during the past week. Mr. McDonald makes his home in Portland and at present is a factory representative of the Roya China, Inc., Sebring, Ohio.

Bill Goddard, former student salesman and camp clerk, was a visitor during the second week in July. Bi spent a number of years in Alask where he served as census enumerator among Eskimos. He is now in the general contracting business in Californ

The Potlatch Plant group has ex-tended a cordial invitation to the membership of the Potlatch White Piners and their families to attend the annual pisnic Saturday, July 23 at Palouse, Washington, according to G. D. Stillwell president. There are 111 members of the Potlatch White Piners.

Clearwater

John Shepard and Cut Epling at-tended the Western Safety Conference in Portland June 26-27-28-29. John gave one of the principal talks at the Conference on his training program. He stressed principally on how to set up a departmental training plan which included the four following steps. First, they should set up lines of promotion, I e., a job progression system listing the

Picture below shows the 3 h.p. garden tractor that has been converted for use in spraying the weeds at Potlatch Unit.



July, 1949

required jobs and the optional jobs within each department. Secondly, a rew personnel record system should be developed showing the inventory of stills, seniority, job history and job performance. Third, to determine the training needs, i.e., the current manpowtraining needs, i.e., the current manpow-er requirements for each job and each shift, current number qualified and the reserve needed to offset promotions, transfers, separations, expanded department and extra shifts; and lastly, to nstall systematic training method to elect and train job instructors, make job installation breakdown, check per-sonnel records for eligible trainees, schedule the time and units of instruction and record the progression and performance of the trainees. The other delegates from industry were very much interested in the PFI training program and many requests were received for ditional information.

Governor Robins extended a written invitation for the Conference to hold their 1950 meeting in Idaho. The invi-tation was accepted by the Board of Governors. The Conference itself included the eleven western states.

Bob Myers and Dick Johnson stopped off in Lewiston for a short visit enroute to the East to enter the Weyerhaeuser Sales Company. Bob is scheduled to work in St. Paul office, and Dick is going to Newark, N. J.

During the recent shutdown the car-penter and millwright crews repaired log decks on Number 1 and 2 using steel This is the first time that 1 beams. steel has been used in place of the wood umbers on the log deck at the Clearwater Unit.

On June 26 Clearwater Units Foremens Council held a stag party at the Lewiston Country Club for John Aram. The Foremens Council presented John with a Parker desk pen and an Idaho White Pine plaque with the following motto inscribed: "The proper measure of a mans age is the degree of pain with which he receives a new idea." This motto has been a favorite of John's for many years.

HEADQUARTERS COMMUNITY HALL (Continued from page 3)

green chain to the dryers. The maintenance of cutting knives for the various machines is accomplished by precision built machines and must be kept to the highest order of perfection to obtain fast and accurate cutting of veneer.

The other phase of making veneer is through the slicer. Flitches are made by the head rigs in the sawmill and transported to the veneer plant for processing. This process will be used processing. This process will be used argely for the production of veneers from knotty pine "cants" and will be used as face stock for plywood panels. The slicing machine is an extremely heavy and rugged built piece of equipment. In the hardwood field it is not incommon to slice materials 1/80 inch thick, therefore, the slicing knife and the flitch operating against the knife must be rigidly in place. In this par-licular make of slicer the knife is held

THE FAMILY TREE

Woods News

BOVILL

Camp 40 in the Bovill area was the destination of about nine young "Daily Idahonian" carrier salesmen who were awarded this trip for signing up new subscribers.

The boys were treated to a dinner and witnessed logging operations from falling the trees to loading of logs on flat cars. They were entertained by "Susy," a six-month old brown bear cub which is the pet of the men at this camp. Highlight of the trip, in addi-tion to the noon meal, was watching and boarding the cat walk of Bill Bailey's loader at Clarkia.

HEADQUARTERS NO NEWS

stationary and in a level position while the flitch or cant is operated past the knife in an angled reciprocating mo-tion with an overall stroke of 30 inches and at the rate of 60 strokes per minute.

Thus another milestone in the diver-sification of products for Potlatch For-ests. Inc. has been accomplished. It means better utilization of waste material, more products, wider markets and more employment.

Good Timber

A tree that never had to fight For sun and sky and air and light, That stood out in the open plain And always got its share of rain, Never became a forest king But lived and died a scrubby thing.

The man who never had to toil To rise above the common soil, Who never had to win his share Of sun and sky and light and air, Never became a manly man But lived and died as he began.

Good timber does not grow in ease; The stronger wind, the tougher trees, The farther sky, the greater length, The more the storm, the more the strength:

By sun and cold, by rains and snows, In tree or man good timber grows.

Where thickest stands the forest

growth We find the patriarchs of both, And they hold converse with the

stars Whose broken branches show the scars

Of many winds and much of strife-This is the common law of life.

-Author Unknown

RUTLEDGE NO NEWS



"COPY BOY! BOY! OH, BOY! BOY O-BOY O-BOY!"

Page 7

Page 8

RADIO-PFI

The chart in the columns opposite lists the mobile radio services and channels that have been allotted to forest industries by the Federal Communications Commission. Permanent channel assignments became effective July first.

Much of the credit for the work necessary to acquire these channels goes to Bob Olin, maintenance superintendent for PFI's logging operations. The idea which resulted in success was born in the Pacific Logging Congress with Olin as head of a committee to study the possibilities of utilizing two-way radio in logging. This committee appeared before the Commission in Washington and argued the forestry needs of wood-using industries. The Commission granted that the industry case was justified but said that, in order for forest products industries to be seriously considered, a national-not a sectional-group would have to present the case. Thus, the National Forest Industries Communications group was formed with Olin as chairman of the executive committee.

The FCC awarded forest communications ten clear channels. Two are in the 29.00 megacycle band and eight in the 49.00 band. Awarded with the petroleum industries were six channel in the 153.44 megacycle band, two in the 158.00 band, and four in the 49.00 band. In addition, the wood-using industries will have access to 80 bands in the ultrahigh frequency brackets for experimental work. PFI's bracket is in the 153.00 band.

Bands 44.00 to 50.00 was formerly Television channel Number 1. This was given by FCC to the Mobile Radio Services and will provide 300 channels from the single TV channel.

"There is little doubt," says Olin, "but what radio offers the best means of coordinating the operation and maintenance of heavy logging equipment in remote mountainous areas. In a few years it will grow from a convenience to a necessity."

On a dark and stormy night the trainman was signalling to the engineer he dropped his lantern to the when ground. Another man passing by tossed it back to him on top of the boxcar. In a few minutes the engineer came rushing up. "Let's see you do that again.

"Do what?"

"Jump from the ground to the top of that boxcar."

The ice man smiled as his glance fell up the sign: "Please drive slowly. The child the street may be yours."



MOBILE (formerly Television channel no.i) FOREST PRODUCTS (EXCLUSIVE) 50 AMATEUR FOREST PRODUCTS TELEVISION NO. nd Special Industrial 60 TELEVISION NO. TELEVISION NO.4 70 72.02) shore with 72 FIXED 75.98 Industrial 76 TELEVISION NO. 5 80

49.22

49.26 49.30 49.34

49.38 49.42 49.46

49.50 49.54 49.58

49.62

49.66

153.05) FOREST

PRODUCTS and Petroleum

P.F.Inc.) {

158.31 FOREST

158.37 PRODUCTS 158.43 and Petroleum

153.11

15323 15329 153.35

 $\Delta\Delta \gamma$ 88 to 108 Megacycles FM BROADCAST (100 Channels) 108 to 152 Megacycles AERONAUTICAL NAVIGATION GOVT. AMATEUR In 150 MOBILE 162 GOVT 174 TELEVISION CHANNELS NOS. 8-9-10-11 20

400 GOVT 456.05 FOREST PRODUCTS 10 share 20 channels 457.95 with Industrial AMATEUR els450 MOBILE CITIZENS RADIO 470 Others

LIST MOBILE RADIO SERVICES PUBLIC RADIO COMMUNICATION PUBLIC TELEPHONE PUBLIC SAFETY POLICE FIRE FORESTRY (STATE) HIGHWAY MAINTENANCE SPECIAL EMERGENCY INDUSTRIAL POWER PETROLEUM FOREST PRODUCTS MOTION PICTURE RELAY PRESS SPECIAL INDUSTRIAL LOW POWER INDUST. L AND TRANSPORTATION INTERCITY BUSES HIGHWAY TRUCKS RAILROAD TAXICAB

URBAN TRANSIT

AUTOMOBILE EMER-

- GENCY