ON THE AIR

WED. PROGRAMS

CFCY-TV — CHANNEL 13

1.30 p.m.—Afternoon Musicale
2:00 p.m.—Chez Helene
2.15 p.m.—Nursery School
2.30 p.m.—Our Miss Brooks
3.00 p.m.—Documentary '60
3.30 p.m.—Open House
4.00 p.m.—P.M. Party
4.30 p.m.—Friendly Giant
5.00 p.m.—Art In Action
5:30 p.m.—Huckleberry Hound
6.00 p.m.—Count of Monte Cristo
6.30 p.m.—Adventures with Santa Claus
6:46 p.m.—CFCY TV News and Weather
7:00 p.m.—Gazette
7:30 p.m.—Sea Hunt
8:00 p.m.—Lawrence Welk Show
8:30 p.m.—I Love Lucy
9.00 p.m.—R.C.M.P.
9.30 p.m.—Live A Borrowed Life
0:00 p.m.—Perry Como
1.00 p.m.—Unforseen
1.30 p.m.—Explorations
12:00 p.m.—CBC TV News
12:13 a.m.—Local Weather Forecast
12:15 a.m.—Viewpoint

CKCW-TV — CHANNEL 2

8:00 a.m.—Station Sign On
Between Ourselves
8:15 a.m.—Television News
8:25 a.m.—Weather and Sports
8:30 a.m.—Turner's Corner
9:15 a.m.—At Home With Helen Crocker
10:00 a.m.—Romper Room
11:00 a.m.—Turners Corner
12.00 noon—Television News
12.10 p.m.—Weather and Sports
12.15 p.m.—Wednesday Playbill
Test Pattern Music
80 Roads To Town
2.00 p.m.—Chez Helene
2.15 p.m.—Nursery School
2.30 p.m.—Our Miss Brooks
3.00 p.m.—Abbott & Costello
3.30 p.m.—Open House
4.00 p.m.—P.M. Party
4.30 p.m.—Friendly Giant
5.00 p.m.—Art in Action
5:30 p.m.—Huckleberry Hound
6.00 p.m.—Supper Club
6:15 p.m.—News
6:25 p.m.—Supper Club
6:35 p.m.—Weather
6:40 p.m.—Supper Club
6 50 p.m.—Sports
7:00 p.m.—Sea Hunt
7:30 p.m.—Rifleman
8:00 p.m.—Highway Patrol
8:30 p.m.—Bunkhouse Boys
9.00 p.m.—R.C.M.P.
9.30 p.m.—Live A Borrowed Life
10:00 p.m.—Perry Como
11.00 p.m.—The Unforseen
11.30 p.m.—Explorations
12:00 p.m.— CBC News
12:15 a.m.—CKCW News
12:20 a.m.—Sign Off

CFCY RADIO

WEDNESDAY

6;55—Sign On
6;57—News Headlines & Weather
7;00—Hebrew Christian Hour
7;15—Country & Western Roundup
7;30—News & Weather
7;35—Musical Interlude
7;40—Farm Reporter
7;51—Musical Interlude
8;00—News
8;11—Weather
8;16—Country & Western Roundup
8;45—Weather
8;50—News
9;00—Morning Devotions
9;10—Morning Moods
9;30—Top Tune Time
9;45—Morning Moods
10;00—News
10;05—Magazine of the Air
10;30—Melody Parade
10;45—Swift Money Man
11;00—News Headlines & Weather
11;02—Magic of Music
12;00—Weather
12;05—Rhythm Roundup
12;30—News & Weather
12;45—Rhythm Roundup
1;00—News Headlines & Weather
1;02—Mar. Farm Broadcast
1;32—Jane Grey Show
1;57—Musical Interlude
1;45—School Bdcst
2;00—School Bdcst
2;15—Tommy Hunter Show
2;45—Best On Request
3;00—News Headlines & Weather
3;02—Best On Request
4;00—News & Weather
4;05—Best On Request
4;30—Quaker Flour Program
4;35—The Outports
5;00—News & Weather
5;05—The Outports
6;00—News & Weather
6;10—Interlude
6;15—Music for You
7;00—Sports Roundup
7;05—Music for You
7;30—News & Weather
7;45—Back to the Bible
8;15—Don Messer's Islanders
8;30—Tonight's Music
9;00—Assignment
10;00—News & Inland & Marine Weather
10;15—Starlight Serenade
10;45—Memo from the U.N.
11;00—Dominion Bandstand
11;30—Moxie Whitney's Orch.
12;00—Dominion News
12;10—Sign Off

CBA RADIO

WEDNESDAY

7;15—Marine Weather & Fill
7;30—News, Sports, Weather
7;35—A.M. Chronicle
8;00—News, Weather
8;15—Maritime Sportscast
8;20—A.M. Chronicle
8;45—Morning Devotions
9;00—News
9;05—A.M. Chronicle
9;55—News
10;00—A.M. Chronicle
10;45—Joan Marshall
10;55—For Consumers
11;00—News
11;03—For Piano
11;15—Kindergarten Of The Air
11;30—Fighting Words
12;00—Jamboree Junction
12;30—Maritime Farm Broadcast
1;00—News, Weather
1;15—Much Ado About Music
1;30—Curtain Time
1;45—Atlantic School Broadcast
2;00—Atlantic School Broadcast
2;15—Tommy Hunter Show
2;45—John Drainie Tells His Story
3;00—News
3;03—Trans-Canada Matinee
4;00—Variety Hour
5;00—News
5;04—Maritime Fish Broadcast
5;30—Tempo
6;00—News, Weather
6;15—Reg. Commentary, Mar. Sportscast, Mus. Intelude
6;30—Tempo
7;00—News
7;10—Byline
7;15—Tempo
7;30—Tempo
8;00—Teen Tempo & Music
8;30—Introduction To Wednesday Night
8;40—Organ Recital
9;00—The Messiah
12;00—News
12;15—Here's the Weather
12;25—Sign Off

Sun Showers Energy Beyond Real Need

—By JOHN BARBOUR
Associated Press Science Writer

In France a giant eye gathers the power of the sun and pinpoints it into heat strong enough to melt steel.

In Florida, sunlight soaks into flat rooftop panels to heat a family's water supply.

In North African wasteland, sunlight distills sea water for drinking.

And in the Arizona desert, an American Indian cooks his food over the sun's flame focused by a mirror.

Every day the sun hovers on the earth 30,000 times as much energy as man needs for all his power purposes.

And every day most of this free power is wasted because man doesn't know how to gather it up and store it for use at his will.

TINY WONDERS

The common blade of grass is a wonder man can't reproduce. Yet it contains millions of tiny sunlight engines more efficient than anything man has yet been able to build with his reflecting mirrors and his special chemicals. Still, there has been some progress.

Overhead the Vanguard I satellite broadcast a radio signal from 2,400 miles in space. It got its power from sunlight trapped in small flat windows on its surface and converted into electricity.

The Russians have a highly polished mirror device that gathers the sun's light and focuses it on a package of special material that converts the heat into 40 watts of electricity.

The United States Army has developed a helmet with small solar cells on the crown. These solar cells gather sunlight and convert it into enough electricity to power a tiny radio received and transmitter in the helmet.

LOW EFFICIENCY

Some firms producing solar cells of the sort that power Vanguard I claim these cells are 10 per cent efficient. That means they convert to electricity 10 per cent of all the sun's energy that strikes them.

In the future, your home may be powered by a roof panel of these solar cells. One firm says a 40-by-20-foot roof section shingled with solar energy cells could deliver six times as much electricity a month as the average home needs.

But this is still mostly dream stuff. At present solar cells are too expensive for such large-scale use.

It is only in unusual places that present solar energy machines are practical. They can be used where sunlight is plentiful and in desert or wasteland areas where other power is not available.

Solar devices differ widely. Solar cells produce electricity when the sun's light excites their sensitive materials.

Some devices, like the Florida-style hot water heaters, simply gather the sun's heat and transfer it to the water, much like a radiator. Experimental home heater devices use similar techniques.

DONE BY MIRRORS

Solar scientists have used huge polished mirrors to reflect and focus the sun's radiation on one particular spot. One device using mirrors and lens to concentrate the sun's energy is operated by the U.S. Army's quartermaster research and engineering centre, Natick, Mass.

This solar furnace can poke a fist—5,000 degrees hot — through an iron beam in minutes.

Other mirror devices are used to focus the sun's heat on thermoelectric packages. These consist of materials which exchange electrons when they are heated—and hence produce electricity.

ICE FROM SUN

Soviet engineers have built a solar engine which operates a refrigeration plant producing over 500 pounds of ice a day.

Small-scale solar refrigerators and ice producers were demonstrated in Europe as early as 1870.

Also in the 1870s solar power was used to distill drinking water for men working a copper mine high up in the Andes Mountains of South America.

Today solar-powered radios and clocks are on the American market. But these are really just fringe benefits of the solar bonanza that scientists foresee.

The day may come — perhaps within your lifetime—when most of your household power will come from the free outpourings of the gigantic flame in space on which depends life itself.

Major Road Blocks Hurdled On Columbia R. Development

By HAROLD MORRISON
Canadian Press Staff Writer

WASHINGTON (CP)—The International Joint Commission Monday hurdled major roadblocks to move closer to complete agreement on proposed principles for joint development of the Columbia River for power and flood control.

The two member governments —Canada and the United States —have ordered the commission to draft a set of principles on which a construction agreement or treaty can be negotiated. The river flows through British Columbia and the northwest United States.

Such a joint deal would envisage a power program running to some $3,500,000,000 during a 50-year period. It would provide about 27,000,000,000 kilowatts of power a year, about five times the power now used by Vancouver.

After Monday's opening session of a three-day meeting, qualified authorities said most of the major issues were disposed of and there is general optimism that a complete set of principles may be drafted by Wednesday.

DELAY POSSIBLE

However, there may be some delay in preparing detailed language of a 3-page draft and if so the final legal work may be undertaken by the Canadian and U.S. members at a Boston meeting Jan. 13.

The Boston meeting is being called primarily to examine the feasibility of harnessing the Passamaquoddy Bay tide waters to provide power for New Brunswick and Maine.

Initial commission view, it was learned, is that the Passamaquoddy project would be more profitable to the U.S. than to Canada.

However, all phases of the proposed venture will be examined before any commission recommendations are made.

The joint draft of principles on the Columbia, requested by the Canadian and U.S. governments, will be based on a 50-50 split between the two countries of all additional power generated on the U.S. side as a result of water storage and regulation undertaken on the Canadian side.

In addition, Canada would retain the right to divert any of her Canadian waters for her own use in British Columbia and would get $4,000,000 or $5,000,000 a year as U.S. payment for control measures which would prevent flood damage on the U.S. side.

CONTRACT BRIDGE

By B. JAY BECKER

West dealer.
East-West vulnerable.

NORTH
♠ J4
♥ A Q 10 5
♦ A Q J 10
♣ J 5 3

WEST
♠ 8 6 2
♥ 9
♦ 9 6 5
♣ A K Q 10 4 2

EAST
♠ 9
♥ K J 7 6 3 2
♦ K 7 4 2
♣ 9 7

SOUTH
♠ A K Q 10 7 5 2
♥ 8 4
♦ 8 3
♣ 8 6

The bidding:

West	North	East	South
Pass	1 ♥	Pass	1 ♠
2 ♣	2 ♦	Pass	3 ♠
Pass	4 ♠		

Opening lead—king of clubs.

The declarer would often do better if he knew exactly how the opponents' cards were divided Seldom would he fail to make as many tricks as possible if he could see the adverse hands.

An important part of dummy play, therefore, is to be able to figure out the makeup of the opponents' hands, even though their cards cannot actually be seen.

In many hands it is possible for declarer to do this.

West led the king of clubs and continued with the queen. East playing high - low. West then shifted to the nine of hearts. Had declarer finessed at this point, that would have been the end of the party. East could win the heart and return a heart for a one-trick set..

But South knew the heart finesse was futile. He knew from the opening plays that West had started with the A-K-Q-10-x-x of clubs. He also knew West had passed originally. It was therefore scarcely possible that West could have either the king of hearts or diamonds, or he would have opened the bidding.

To stake his chances on finesses in both suits seemed sure to lead to eventual defeat. Accordingly, having also worked out an alternate line of play, declarer went up with the ace of hearts. He put to work the knowledge that East was marked to have both red kings.

He led seven rounds of trumps in succession, reducing his own hand to the singleton eight of hearts and the 8-3 of diamonds. In dummy he kept the queen of hearts and the A-Q of diamonds.

East had to come down to three cards also, and held the king of hearts and the K-7 of diamonds.

The endplay position was now set up. A heart lead forced East to win with the king and return a diamond to dummy's A-Q.

So South made four spades. He took advantage of an inference that could be logically drawn from the bidding. In effect, he played as though he had seen all 52 cards.

RIPLEY'S BELIEVE IT OR NOT

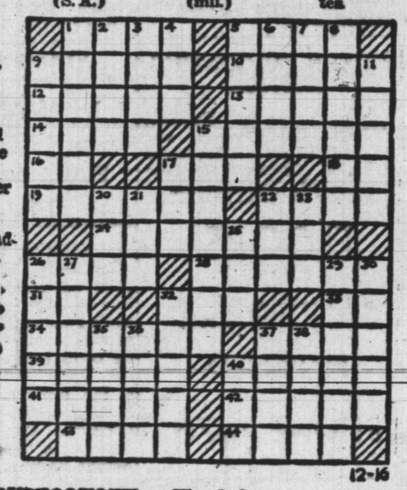
DAILY CROSSWORD

ACROSS
1. Secluded, narrow valley
5. Fellow
9. Quantity of paper
10. Airplane-detecting device
12. Released, as a lock
13. Harangue
14. Soon
15. German field marshal
16. Iron (sym.)
17. Electrified particle
18. North America (abbr.)
19. Spanish ruler
22. Bohemian-like
24. Yardstick
26. Long nail
28. Exchanged
31. Music note
32. Big ——
33. Greek letter
34. Become visible
37. Aryan invader of Great Britain
39. Heathen images
40. West Pointer
41. Rodent
42. Mountainous
43. Alumnus (colloq.)
44. Malt beverages

DOWN
1. Cannoneer
2. Italian resort
3. The Emerald Isle
4. Man's nickname
5. Sing in a low voice
6. Injure
7. First man
8. Evident
9. Drink deeply
11. Kind of race
15. Barnyard "boss"
17. River (S. A.)
20. Wine receptacle
21. Fresh
22. Constellation
23. —— Sea
25. Footed vase
26. Demand
27. Pomeranian, for one
29. Surpasses
30. Short, simple song
32. Stationed (mil.)
35. Flow forth freely
36. Miss Maxwell
37. Bucket
38. Not working
40. Mandarin tea

MOCHA THILL
ASHEN RADIO
SLAW BALLOT
TOM SAG ENS
PUNDIT
SHINY CUPID
MOOD NILE
ANNIE ANSLE
PEGAYS
SEE MAR KID
PARTED PISO
OSIER MANCY
TENDS APSES

Yesterday's Answer



DAILY CRYPTOQUOTE — Here's how to work it:

A X Y D L B A A X R
is L O N G F E L L O W

One letter simply stands for another. In this sample A is used for the three L's, X for the two O's, etc. Single letters, apostrophes, the length and formation of the words are all hints. Each day the code letters are different.

A Cryptogram Quotation

DWVZU DU IKGJ KG KWVPQ, DU GHKUP XVII GCF GJIGFKCPVKE-IEFCI.

Yesterday's Cryptoquote: GRATEFUL MUST WE BE THAT THE HEART MAY GO WHITHERSOEVER IT WILL—OVID.

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ETTA KETT

OUR BOARDING HOUSE MAJOR HOOPLE

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