ON THE AIR

WEDNESDAY PROGRAMS

CFCY TV

1.30 p.m.—Musical
2.00 p.m.—Lucy Show
2.30 p.m.—This Is The Life
3.00 p.m.—As The World Turns
3.30 p.m.—Take Thirty
4.00 p.m.—The Secret Storm
4.31 p.m.—Razzle Dazzle
5.00 p.m.—Forest Rangers
5.30 p.m.—Music Hop
6.00 p.m.—Nation's Business
6.15—Live Longer
6.31 p.m.—Gazette
7.01 p.m.—CFCY TV News
7.15 p.m.—Purity Photo Quiz
7.29 p.m.—TBA
7.30 p.m.—Bewitched
8.00 p.m.—The Rogues
9.00 p.m.—Red River Jamboree
9.30 p.m.—Perry Mason
10.30 p.m.—Festival
11.30 p.m.—N.F.B.
12.15 a.m.—CBC TV News
12.28 a.m.—Local Weather
12.30 a.m.—Sign Off

MacDONALD RADIO SERVICE
Guaranteed Repairs
Radios - Record Players
Amplifiers
180 KENT ST.
PHONE 4-6915

CKCW TV

10.00 a.m.—Station Sign On
National School Telecast
10.30 a.m.—Nova Scotia Schools
11.30 p.m.—Across Canada
12.00 p.m.—Friendly Giant
12.15 p.m.—Chez Helene
12.30 p.m.—Butternut Ridge
12.50 p.m.—News, Weather, Sports
1.00 p.m.—Wednesday Playbill
Gay Adventure
2.30 p.m.—At Home With Helen
Cracker
3.00 p.m.—As The World Turns
3.30 p.m.—Take Thirty
4.00 p.m.—Secret Storm
4.30 p.m.—Razzle Dazzle
5.00 p.m.—Forest Rangers
5.30 p.m.—Fun Time
6.00 p.m.—Nations Business
6.15 p.m.—Supper Club
Lionel Television News
6.25 p.m.—Weather
6.30 p.m.—Sports
6.35 p.m.—Supper Club
7.00 p.m.—Maverick
8.00 p.m.—Dr Kildare
9.00 p.m.—Red River Jamboree
9.30 p.m.—Perry Mason
10.30 p.m.—Festival—Concert
11.30 p.m.—NFB
12.00 p.m.—CBC-TV News
12.15 a.m.—Viewpoint
12.20 a.m.—Lionel Network News
12.25 a.m.—Station Sign Off

CFCY RADIO

WEDNESDAY

6.28—Sign On
6.30—News and Weather
6.35—Country & Western Roundup
6.55—News and Weather
7.00—Hebrew Christian Hour
7.15—Country & Western Roundup
7.30—News and Weather
7.35—Farm Report
7.41—Country & Western Roundup
8.00—News
8.11—Weather
8.16—Country & Western Roundup
8.45—Weather
8.50—Atlantic News Roundup
8.57—Thought For Today
9.00—News & Voice Reports CBC
9.10—Preview Commentary CBC
9.15—Notes and Music
9.27—Matinee Musical Charades
9.30—Notes and Music
9.35—Notes and Music
9.55—What's The Song
10.00—News and Weather
10.05—Notes and Music
11.00—News and Weather
11.05—Notes and Music
11.27—Matinee Musical Charades
11.30—Notes and Music
11.45—Bulletin Board
11.50—Notes and Music
11.55—Atlantic News Roundup
12.00—Weather
12.05—Towns and Country Time
12.30—News and Weather
12.15—Don Messer CBC
12.30—News and Weather
12.43—P.E.I. Road Report
12.45—Town and Country
1.00—News Headlines & Weather
1.02—Town and Country Time
1.15—Tommy Hunter-CBC
1.45—Town and Country Time
2.00—News and Weather
205—Tops In Country and Pops
2.27—Matinee Musical Charades
2.30—Tops In Country and Pops
3.00—News Headlines & Weather
3.03—Trans-Canada Matinee CBC
3.30—Tops In Country and Pops
4.00—News Headlines and Weather
4.05—Canada Roundup CBC
4.10—Tops In Country and Pops
4.30—The Outports
5.00—News and Weather
5.05—Matinee Musical Charades
5.28—The Outports
5.25 20—Marine Weather
5.28—The Outports
6.00—News and Weather
6.15—On Parliament Hill CBC
6.20—Sports Parade
6.30—Tonight's Music
7.00—Back to the Bible
7.30—News and Weather
7.45—Program Schedule
7.46—Tonight's Music
8.58—Headlines and Weather
9.00—University of The Air-CBC
9.30—Winnipeg Pops Orchestra
10.00—CBC—National News, CBC
10.30—Music Canada CBC
11.00—News and Reg. Weather
11.05—Starlight Serenade
11.30—News and Maritime Weather
11.35—Starlight Serenade
12.00—News, Regional Weather and Sports Scores
12.05—Sign off

CBA RADIO

WEDNESDAY

6.00—The Morning Show
7.00—The Morning Show
8.00—CBC News and Inland Weather
8.15—Maritime Sportscast
8.21—The Morning Show
8.25—The Bob Goulet Show
8.45—Max Ferguson
9.00—CBC News
9.11—Commentary
9.30—A.M Chronicle
10.15—Playroom
10.30—University of The Air
11.00—CBC News
11.05—Joan Marshall
11.15—For Consumers
11.20—Record Album
11.30—The Archers
11.45—Music On The Heather
12.00—Jamboree Junction
12.10—Summer Olympic Reports
12.30—Maritime Farm B'Cast
1.00—CBC News and Weather
1.15—Summer Olympic Reports
1.30—The Tommy Hunter Show
1.45—Time Out For Melody
1.59—DO Time Signal
2.00—Time Out For Melody
2.15—Atlantic School B'cast "Playtime"
2.30—Atlantic School B'cast "Things of Nature"
2.45—Reading From The Classics
3.00—CBC News
3.03—Trans-Canada Matinee
3.30—Trans-Canada Matinee
4.00—CBC News
4.03—Canadian Roundup
4.10—Music In The Air
4.15—Music In The Air
4.30—Countdown
5.00—Mar, Fish B'cast
5.20—Tempo
CBC Notebook
6.00—CBC News
6.15—On Parliament Hill
6.20—Today's Editorial
6.25—Inland Weather and Sports Scores
6.30—Summer Olympic Report
6.45—Music In the Evening
7.30—Christian Frontiers
8.00—Assignment
8.30—Dixieland Downbeat
9.00—Music Diary
9.30—Can. Chamber Orchestra
10.00—CBC National News, On Parliament Hill and In The Provinces
10.30—Serenata
11.00—Music of Handel, Allan Sangster
12.00—CBC News
12.03—Sports Scores, Inland and Marine Weather
12.15—Music In The Night

10:30 PM till 11:30 PM **TONIGHT** CHANNEL 13

YOUR TELEPHONE COMPANY PRESENTS ON TV

FESTIVAL'S "PREMIERE"

featuring:

LYNN SEYMOUR
the sensational young Vancouver ballerina of England's Royal Ballet — in two new ballets with Christopher Gable.

SVIATOSLAV RICHTER
the great Russian pianist in his North American television debut.

MARILYN HORNE
Internationally-known mezzo-soprano in her first Canadian TV performance.

MARITIME TELEGRAPH & TELEPHONE CO., LIMITED

Oxygen Converter Marks Changes In Steel Industry

A furnace as high as a three-storey building turns iron into steel with supersonic blasts of oxygen. These "oxygen converters" are among various types of massive new equipment being installed to boost the efficiency of the U.S. steel industry. In the following story Roger Lane, Associated Press business news writer, describes the equipment and tells how it works.

By ROGER LANE

NEW YORK (AP)—A fiery pot called an oxygen converter symbolizes a transformation in steelmaking as the modern industrial leviathan rumbles into its second century.

Actually, it's just one face of major innovation pulsing everywhere—from wilderness ore fields to glistening laboratories and $50,000,000 computer - run steel processing lines.

A furnace—probably two of them—stands behind each product of steel, whether dispenpin, bridge, tomato can or auto crankshaft.

The basic oxygen furnace is at the heart of steelmaking. And it can make steel faster, cheaper and five to eight times faster than equipment it is replacing.

In addition, the oxygen converter fits neatly in the production chain with another dramatic, cost-reducing new step in steel-making called continuous casting.

Some experts say the oxygen converter and continuous casting together with associated technology now coming in can, within five years, slice $30 to $40 a ton (20 to 25 per cent) from the cost of making a ton of steel.

The basic oxygen furnace is a steel vessel nearly three storeys high, lined with firebrick and shaped like an old-fashioned bean pot. Trunnion supports on either side allow it to pivot for loading or discharge.

Molten iron, steel scrap, a little limestone and a pinch or other materials dumped in from the top are cooked into a 100- to 300-ton brew of steel.

The furnace gets its name from a water - cooled oxygen nozzle the length of a telephone pole that is lowered from above until the tip nearly touched the charge.

Then pure oxygen is blown through at supersonic speed (13,000 cubic feet a minute), burning off impurities at up to 3,000 degrees and thereby converting the contents to steel. This takes 30 to 50 minutes.

The oxygen converter has sounded the death knell for the open hearth furnace, which as recently as 1961 was used for 80 per cent of industry output in the U.S.

Nearly 900 open hearths are in service, one-third with efficiency boosted about 30 per cent by recent addition of oxygen lances.

Commonly a dozen to 16 open hearths are retired when a new two-furnace oxygen shop is started up.

Operating cost savings with basic oxygen furnaces are $5 a ton, sometimes much greater. They required half as much capital to install — $20,000,000 to $25,000,000 for a two - furnace shop that will turn out $2,000,000 tons a year.

Basic oxygen furnaces poured three per cent of U.S. steel in 1960 and six per cent in 1962 The rate may hit 12 per cent this year, and by late 1966 it could hit 35 per cent as the U.S. overtakes Japan for world leadership in tonnage capacity for this type of furnace

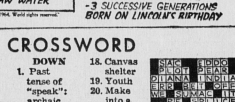
In continuous casting, liquid steel is poured into an elevated chamber. As it solidifies to taffy constituency, exit openings underneath permit it to descend by gravity, forming a huge yellow-red ribbon up to a foot thick and up to several feet wide.

RIPLEY'S BELIEVE IT OR NOT

DAILY CROSSWORD

ACROSS
1. Revolved
5. Whip
9. Mexican dollar
10. Medley
11. Proofreader's mark
12. Large reading desks
14. Marks as correct
15. Printers' measures
16. Street: abbr.
17. Insects
20. Perish
21. Meat of the calf
22. Hauled
23. Exhaust
25. Draws close
26. Harbor
27. Two harnessed animals
28. To be in debt
29. Laughs noisily
32. Idem: abbr.
33. Mass
34. Bind
35. Hawaiian tropical tree
37. Backbone
39. Persian coin
40. Mist
41. Sweet potatoes
42. Poems

DOWN
1. Past tense of "speak"; archaic
2. Persist in an undertaking
3. Employ
4. Particle of negation
5. Lends
6. Gifts of charity
7. Kin
8. A native of Indiana
11. Cereal spike
13. Boils slowly, as meat
15. Lamprey
18. Canvas shelter
19. Youth
20. Make into a drama
22. Unable to hear
23. To decay; as food
24. Friable
25. Ship clock
27. Slow, clumsy boat: sl.
29. Points aimed at
30. Sherry, port, champagne



Yesterday's Answer
31. Observe
33. American island in Pacific
36. Crested-hawk parrot
37. Japanese measure
38. Thin mat

DAILY CRYPTOQUOTE — Here's how to work it:

A X Y D L B A A X R
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, apostrophies, the length and formation of the words are all hints. Each day the code letters are different.

A Cryptogram Quotation

Q SWGN HCWBA GSBXJ RQ ATW CPKI BNAWK SBBOH SPOW Q RPDI.—JEWATW

Yesterday's Cryptoquote: A LONG HAPPINESS LOSES BY ITS MERE LENGTH.—LICHTENBERG

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OUR BOARDING HOUSE MAJOR HOOPLE

Break Yields $2,600 Loot

BRIDGEWATER, N.S. (CP)—Police said Monday thieves had escaped with about $2,600 in cash and cheques in a break Sunday night into Atlantic Wholesale Limited here. About $1,200 in cash was taken.

TAR'S BELIEF

Fifteenth century sailors believed that whistling would conjure up a tempestuous wind.

CONTRACT BRIDGE

By B. JAY BECKER

West dealer.
North-South vulnerable.

NORTH
♠ Q 10 5 2
♥ 10 9 6 4
♦ Q 7 2
♣ 8 3

WEST
♠ A 9 8 7 2
♥ 7
♦ A J 9
♣ Q J 10 6

EAST
♠ J 6
♥ 5 3
♦ 10 8 5 3
♣ A 9 7 4 2

SOUTH
♠ K 4
♥ A K Q J 8 3
♦ K 6 4
♣ K 5

The bidding:

West	North	East	South
1 ♣	Pass	Pass	4 ♥

Opening lead—queen of clubs.

A play that has a good chance to succeed is obviously not as good as a play that is certain to succeed. Whenever the element of luck is present and can be eliminated, that is clear'y the thing to do.

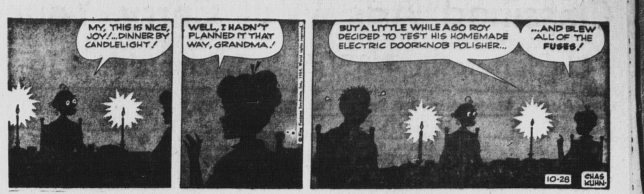
Here is a typical case. South is in four hearts and West leads a club. East takes the ace and returns a club to the king. How should South play the hand in order to avoid the danger of also losing two diamonds and a spade?

The actual declarer took two rounds of trumps and played a low spade to the king. West won with the ace and returned the seven of spades. Mindful of West's opening spade bid, South finessed the ten, losing to the jack. He then lost a trick to the ace of diamonds and went down one.

There is no doubt that South was unlucky to lose the finesse to the jack, since it was highly probable that West would have that card. However, this was far from a certainty, and South should have taken steps to cover the possibility that East had the jack.

What he should have done after drawing two rounds of trumps, ending in his hand, was lead a low spade to the queen West would have been obliged to play low and the queen would have won the trick.

A low spade back to the king would have settled the matter in the actual hand, since East's jack would have appeared and promoted the ten to a trick.

But let's say that East had started with x-x of spades instead of J-x. Even so, South would have made the contract because West would have found it impossible, after taking the king with the ace, to make a lead which did not give declarer either an extra spade trick or an extra diamond trick.

The spade play towards the queen would have eliminated the danger of taking a losing spade finesse.