

Falls Area One Of 8 In Nation Most Vulnerable To Quakes

Niagara Falls has been designated as being in one of the nation's eight areas most vulnerable to earthquake damage by the Environmental Science Services Administration.

The area, called the "St. Lawrence River Region," includes Niagara Falls and Rochester. It begins at Pennsylvania's northeast corner and extends northeastward to Vermont.

The new "seismic risk" map places the strip of New York State bordering Lakes Erie and Ontario and the St. Lawrence in one of the eight "most vul-

nerable" areas in the United States. The map divides the continental United States into four parts — areas thought to be without reasonable expectancy of moderate damage, or of possible major destruction. ESSA said the areas are based mainly on the "known distribution" of damaging tremors, their intensities and geological considerations.

The map shows that California has by far the largest "most vulnerable" area in the country. The mitten-shaped area overlaps Nevada. Another such quake-prone area extends through the mountain states. California alone has had 16,000 of the 28,000 American quakes studied by the mapmakers over a two-year period.

Other "most vulnerable" areas include one in the Mississippi valley that reaches into Illinois, below Danville, and takes in a corner of Indiana; another, wedge-shaped, Eastern Massachusetts and New Hampshire and a third at the northernmost tip of Maine.

Exposed to possible "moderate" quake damage are a number of other areas sur-

rounding those most vulnerable. Much of Central New York and the rest of New England, except Connecticut, are in this category. Most of the rest of the United States is in areas in which only minor quake damage could be expected. Connecticut is in a minor damage area.

Two sections of Florida are shown to be among only three areas which are reasonably earthquake-proof. One takes in all of the state below Daytona Beach, including the Cape Kennedy area, and the other covers the area west of Tallahassee, spilling over cor-

ners of Mississippi and Louisiana. The third area covers much of Southeastern Texas, ballooning from the Louisiana border of the Rio Grande.

"Major destructive earthquakes may occur" in the region, says ESSA. The agency emphasizes, however, that it has made no finding, and can make none, as to the frequency with which damaging quakes may occur.

Dr. Austin C. McTigue, former director of the Canisius College seismograph station in Buffalo, said Monday that "Western New York along Lake Ontario and the St. Lawrence Valley had the same rating of possibility of earthquake occurrence as California."

He said that the possibility of earth shaking "is still high

in Western New York along the St. Lawrence valley. This has been proven by the occurrence of earth shakings over the years in Niagara Falls and St. Catharines, Ont."

He emphasized, however, that "though the possibility of earthquakes occurring in Western New York is equal to anything in the country, the possibility of damage is not related."

After the disastrous earthquake in San Francisco, said Dr. McTigue, the state and the government recommended that buildings should be constructed that would resist "certain energy shakings." Not many efforts, however, have been made in this direction, he said.

He is convinced that steps should be taken to prevent ex-

tensive destruction. "Why evade the condition if this can occur?" he said.

He proposes that a study be done yearly in the form of photographs of various regions of areas subject to earthquakes and tremors.

"If every year a photograph was taken of an area such as a grid of roads running east-west and north-south at some height such as 20,000 or 30,000 feet by a government airplane, the photograph would show any shifting in the road that might have occurred over a number of years."

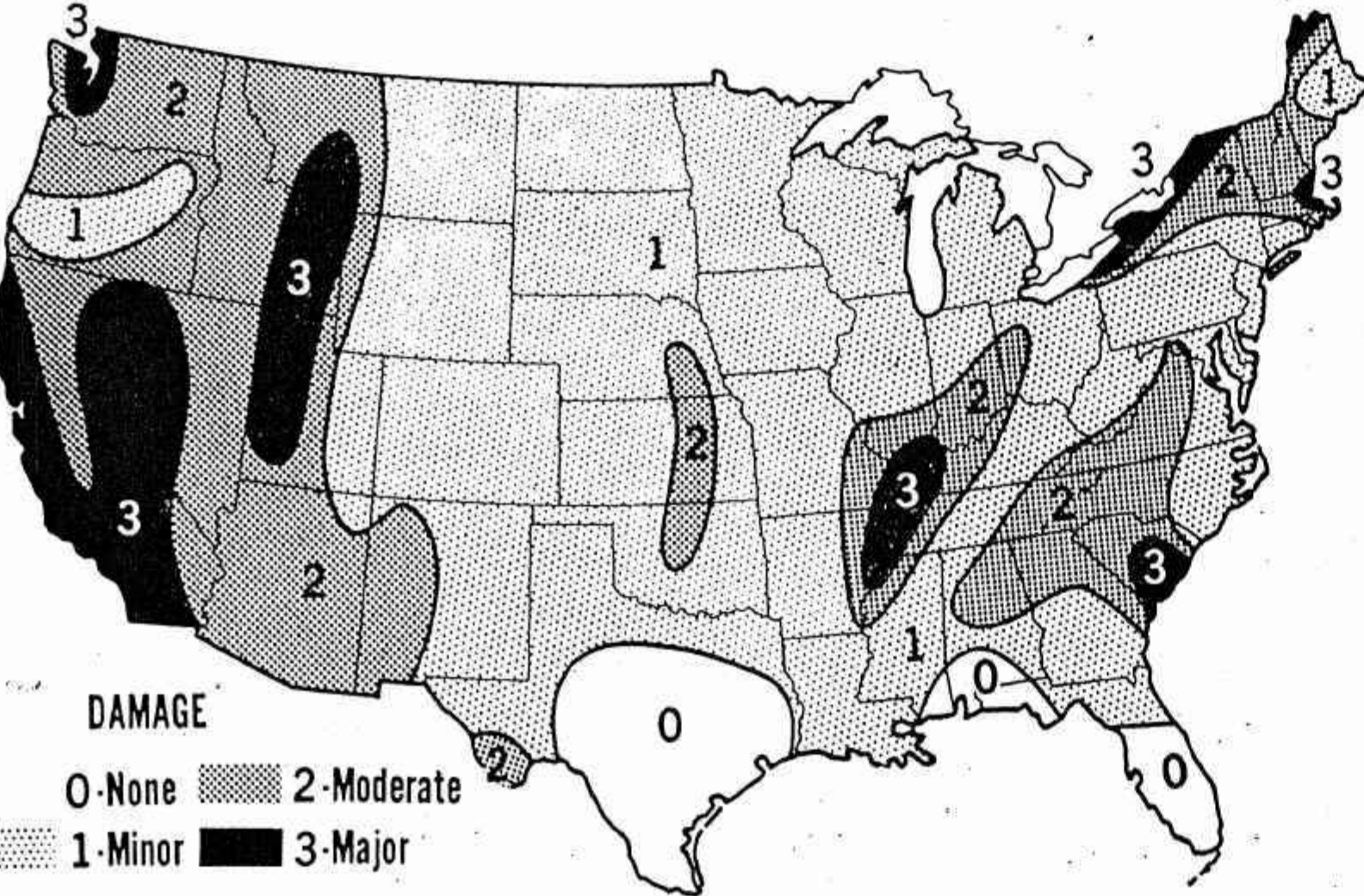
He has written to government officials about this idea but has had no response from them. "There wouldn't be much expense involved," he said.

An ESSA official explained that vulnerability is determined by the "tectonic or geologic changes taking place" in a particular area. Dr. S. T. Algermissen of the Coast and Geodetic Survey, stressed that mapping is subject to continual revision. He said the survey's continuing studies are intended to provide guidelines for codes for quake-resistant building construction.

Since quakes still can be neither predicted nor prevented, Dr. Algermissen noted, the "best deterrent against damage and resultant loss of life" is such construction. He said that if structures in a populous area survive a strong shock, there probably will be "very little" human toll.

Risk zoning in the United States, Dr. Algermissen said, has received less attention in the United States than in other parts of the world, notably Japan, the Soviet Union and New Zealand. Risk studies in America have been limited by a relatively short record of seismicity and a general scarcity of pertinent geodetic data bearing on the problem.

The first recorded U.S. quake occurred in 1534. Dr. Algermissen said high shock intensities have been reported over a "large portion" of the country, although in many areas their frequency has been "quite low."



EARTHQUAKE AREAS—This map depicts areas in the United States that are subject to earthquakes and the degree in which quakes are likely in the various sections of the nation.

Note that the Niagara Frontier is classed as Zone 3, where major destructive earthquakes may occur.

City Has Had Tremors In Past, Last in 1966

While Niagara Falls has never experienced a major earthquake, occasional tremors have occurred in the area.

The last tremor was felt here New Year's Day 1966. Dr. Austin C. McTigue, former director of the seismograph at Canisius College, Buffalo, reported the quake was about 5 on the Wood-Neuman scale, which rates earthquakes from 1 to 12, the maximum.

Alaska's 1964 quake was a Mr. McTigue has described two potential trouble spots as the Warsaw-Alexander area and the lower gorge region of Niagara Falls.

It is because of these "faults," fractures in the rock, and "brontides," weak earth movements too feeble to be recorded, that Dr. McTigue feels Western New York may have further quakes.

The physicist made his prediction of disturbances after a 1946 quake felt in Niagara Falls, Ont., and then in this city. Dr. McTigue believes that shock was the cause of the Schoellkopf power plant collapse in 1956.

Western New York's biggest quake was in the Attica area in 1929, causing damage over 10,000 square miles.

In 1962 vibrations were felt here for about 10 seconds. The shock was also felt in other portions of Niagara County and west to St. Catharines, Ont.

Others in Niagara Falls recorded by the seismograph occurred in March and June 1939 after a February tremor that same year in the Attica area spreading for about 500 square miles.

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What's Doing

Today

Power Vista — State Power Authority, open from 10 a.m. to 5 p.m.

Old Fort Niagara — Youngstown, open from 9 a.m. to 5 p.m.

Young Professionals Club — Meeting of the YWCA, 567 Main St., at 7:30 p.m.

Echo Chorus — Rehearsal at the Echo Club, 341 Portage Road, at 8:30 p.m.

LaSalle Junior Duplicate Bridge Club — Play at the Echo Club, 341 Portage Road, at 8 p.m.

100F — Meeting of the Odd Fellows Hall, 924 South Ave., at 7:30 p.m.

Association for Children with Learning Disabilities — Meeting at the Alas Restaurant at 8 p.m.

Lewisville Kiwanis — Madal Altrane Club — Meeting of the Wheel House on Center St., Lewisville at 7:30 p.m.

Quinta Club — Meeting at the Red Coach Inn, at 8 p.m.

Niagara Frontier Stamp Club — Meeting at the YWCA, at 7:30 p.m.

Parents Without Partners — Meeting at Hyde Park United Presbyterian Church, 1820 Mitchell Ave., at 8 p.m.

Ice Skating — Hyde Park and 9th Street rinks, to 5 a.m. and 4 to 9 p.m. recreational skating and 9:30 to 10:30 p.m. for adults (over 18 years of age).

Women's Auxiliary, Niagara Falls Boys Club of the Pine Avenue Unit — Meeting at 8 p.m.

Golden Age Progressive Euchre — Meeting at the Golden Age Center, Main St., at 7:30 p.m.

St. Catharines Colour Camera Club — Meeting at St. Thomas Aquinas Church, 316 Queenston Road, 8 p.m.

Science Museum Camera Club — Meeting at the Buffalo Museum of Science, Humboldt Parkway, at 8 p.m.

Niagara Falls Public Libraries — Main Library, 1022 Main St., open from 9 a.m. to 9 p.m.; Pine Branch Library, 1377 Pine Ave., open from 1 to 5 p.m.; LaSalle Branch, 87th Street and Buffalo Avenue, open from 10 a.m. to 6 p.m.

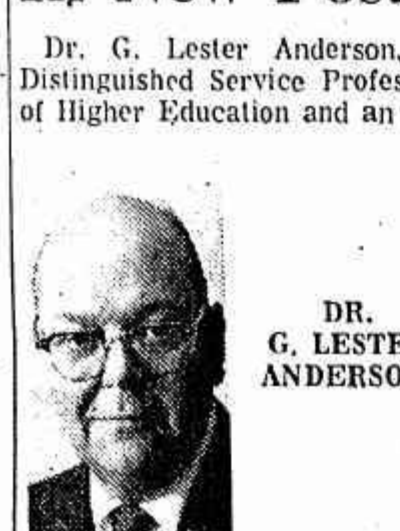
Bookmobile — Lindbergh Avenue and 27th Street from 3:30 to 4:30 p.m.

Aliens Filing in Address Resort — Assistance made by going to the International Center and Girls Club, 317 Portage Road, to 5:30 p.m.

Royal Arch Masons No. 200 — Installation ceremonies at the Masonic Temple, South Avenue and 10th Street, at 7:30 p.m.

Niagara Frontier District of Radiologic Technologists — Meet at Deaconess Hospital, 1002 Humboldt Parkway, Buffalo at 8 p.m.

Professor At Buffalo In New Post



DR. G. LESTER ANDERSON

Dr. G. Lester Anderson, a Distinguished Service Professor of Higher Education and an administrator at the State University at Buffalo, has resigned to become director of the Center for the Study of Higher Education at Pennsylvania State University.

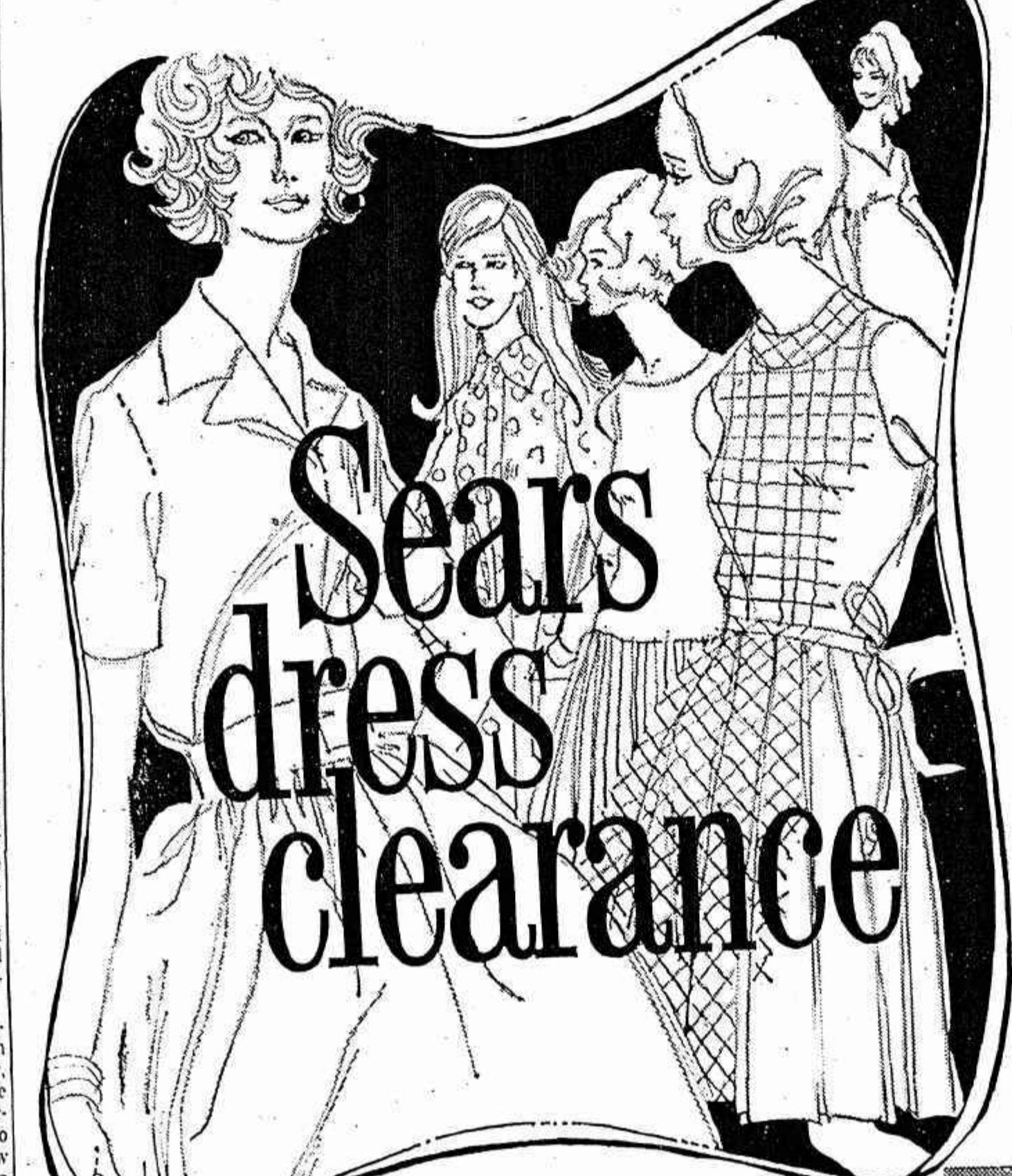
He will be responsible for the organization of the center which will be established next July 1.

Dr. Anderson joined the University at Buffalo in 1951 as dean of administration and professor in the department of education and went on to hold several other key positions including vice chancellor for educational affairs (1955-62), vice president for educational affairs (1962-65) and acting chairman of both the department of higher education and the office of institutional research (1965-68).

Dr. Rollo L. Handy, provost of the faculty of educational studies at the University at Buffalo, said of Dr. Anderson:

"His services to this university have been exceptional in his various roles as scholar, teacher, and administrator. He was a prime mover in the merger of the University of Buffalo and the State University of New York. His reputation as a scholar is extremely high; and his efforts in developing the department of higher education were outstanding. His departure is a great loss to this campus."

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Tomorrow

Power Vista—State Power Authority, open from 10 a.m. to 5 p.m. from 9 a.m. to dusk.

Old Fort Niagara—Youngstown, open from 9 a.m. to dusk.

City Market — Pine Avenue and 18th Street, open from 9 a.m. to 7 p.m.

LaSalle Kiwanis Club—Meeting at the Treadway Inn at 12:15 p.m.

Niagara Falls Exchange Club—Meeting at the Treadway Inn at 12:15 p.m.

Niagara Falls Exchange Club—Meeting at the Holiday Inn, First and Main Streets, at 12:15 p.m.

Leaders Forum Singer — Rehearsal at 625 Orchard Parkway at 9:45 a.m.

Recovery Inc.—Meeting at St. Paul's Methodist Church, 723 Seventh St., at 8 p.m.

LaSalle Taps Weight Control Club — Meeting at the LaSalle Library, 87th Street and Buffalo Avenue, 7:30 p.m.

O-Taple Club — Meeting at the Old Hippodrome Hall, Pine Avenue and 19th Street, at 8 p.m.

A. A. and Al-Anon Family Groups — Meeting at 438 Seventh St. at 9 p.m.

Niagara Falls Service Club—Meeting at Hotel Niagara, Jefferson Avenue and First Street, at 12:15 p.m.

Foot Dream Club — Meeting at the Niagara Community Center, 15th Street and Center Avenue, at 8 p.m.

Trinitas formerly the Mt. Yu Club — Meeting at Temple Beth Shalom, Carleton Avenue, at 7:30 p.m.

New Horizon's Club—Meeting at the YWCA at 7:15 p.m.

Barbershop Quartet Society—Rehearsal at the Century Club at 8 p.m.

Niagara Fire Co. No. 1 — Exempt Firemen's Association and Ladies Auxiliary — Meeting at the Club House, Lockport Road, at 8 p.m.

Niagara Lodge No. 821, Loyal Order of Moose — General membership meeting at the Moose Lodge, at 8:30 a.m.

Niagara Falls Real Estate Board — Meeting at the Alas Restaurant at 12:15 p.m.

Ice Skating — Hyde Park and 9th Street rinks, 3 to 5 and 6 to 7 p.m. Family skating with free instruction for children under 12 years of age from 3 to 5 p.m.; 7:30 to 10:30 p.m. recreational skating.

Aliens Filing in Address Resort — Assistance made by going to the International Center and Girls Club, 317 Portage Road, from 9:30 a.m. to 5:30 p.m.

Golden Age Bowling — Meeting at the Central Lakes, at 9:30 a.m.

Niagara Falls Public Libraries — Main Library, 1022 Main St., open from 9 a.m. to 9 p.m.; Pine Branch Library, 1377 Pine Ave., open from 1 to 5 p.m.; LaSalle Branch, 87th Street and Buffalo Avenue, open from noon to 8 p.m.

Bookmobile — 22nd Street School, 9:30 in noon and Linwood Avenue and 27th Street, 1:30 to 4:30 p.m.

East Side Committee — Meeting at Falls Products, 201 12th Street, at 7 p.m.

Zion Lutheran Church — Congregation meeting with dinner at 6:30 p.m. at the church.

Nature Talk — Leonard G. Trumble will speak on "Nature and Its World."

Shopping for Lamb

BUENOS AIRES (AP) — A Jordanian military mission is here shopping for lamb and other products to feed its troops, foreign trade office sources said Monday.

The mission, headed by Maj. Gen. Rashid Arekat, reportedly wants to buy 2,500 tons of frozen lamb. It is also studying the purchase of other products included in an Argentine export catalogue.

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