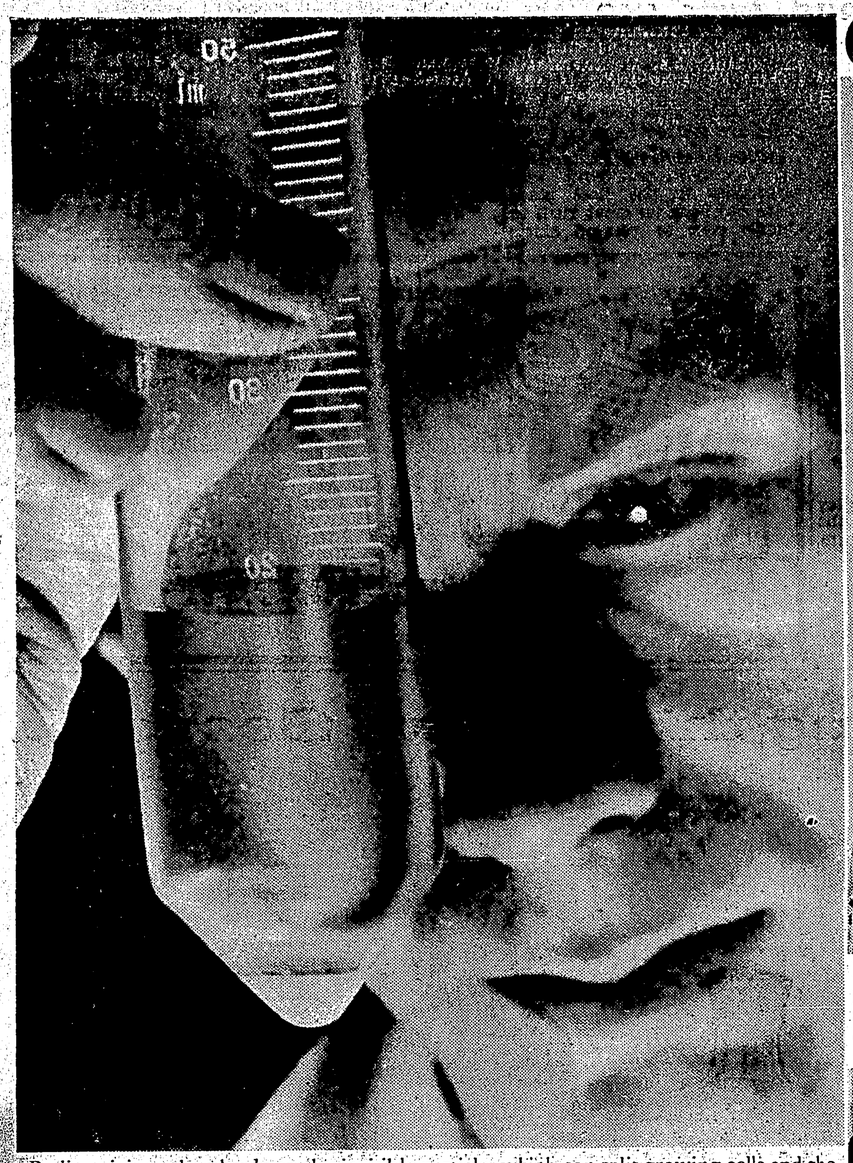
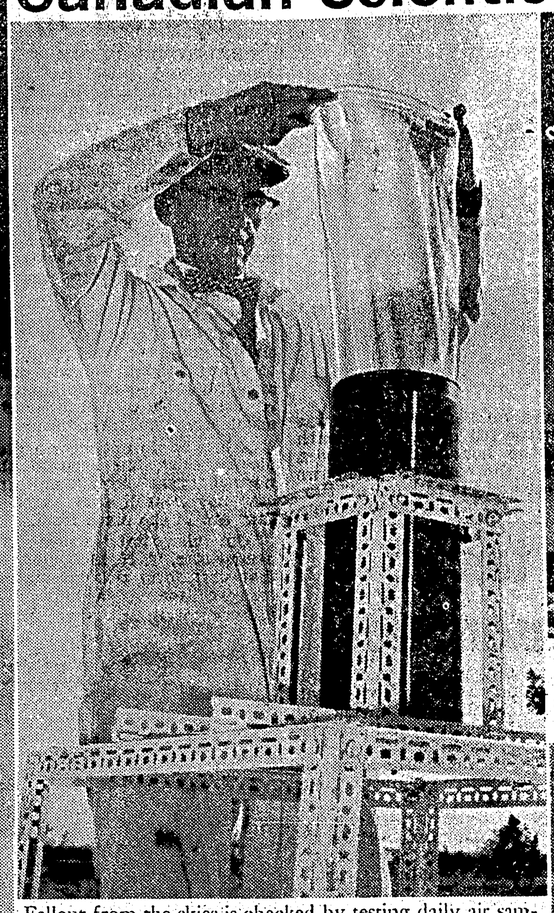
# Canadian Scientists Check Radiation Threat



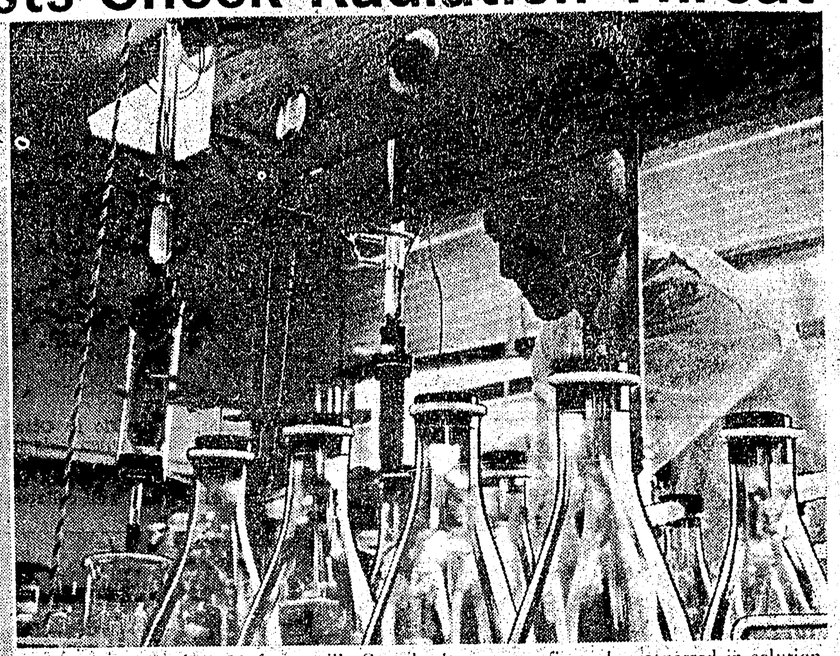
Radioactivity — bombardment by invisible particles which can split growing cells and the greatest menace life has ever faced — is the day-to-day study of a group of Canadian health-scientists. Their job: collect facts, isolate dangerous elements, as above, and evaluate health hazards. From a modest start, the program of protection services for industrial radiation workers, plus subsequent analysing of fallout radiation levels in milk, water, air dust and human bone, has been steadily intensified. The Radiation Protection Division in Ottawa obtains data from (1) a constant check on radiation received by 13,000 workers, who use radioactive substances and x-rays in hospitals, industry and research projects, by issuing them with radiation-sensitive badges which are periodically sent to Ottawa for checking; (2) atmospheric fallout observers at 24 stations across Canada who collect samples of dust and rainwater and forward them to Ottawa for radiation count; (3) detection of strontium 90 — potentially most dangerous because of its high radiation, similarity to calcium and long-lived radioactivity — by extracting it from the ashes of milk and bones; results indicate trends in strontium 90 levels of dairy milk and its human absorption; (4) building of two special chambers for measuring radioactivity in a living person; their eight-inch-thick steel walls will shield against natural and man-made radioactivity in the area, allowing accurate readings of the person under test.



Fallout from the skies is checked by testing daily air samples collected at meteorological stations across Canada. Rain and snow samples fall into plastic bags which are changed every month and sent to Ottawa laboratory for analysis.

National Film Board of Canada Photos by Gar Lunney

Dr. P. G-P. Mar, head of division's radiochemical laboratory, records location of milk and bone sampling points.



Extracting strontium 90 from milk. Samples burnt to a fine ash are passed in solution through ion-exchange column. Technicians tried various resins to find best for collecting strontium particles. It takes 28 years for strontium 90 to lose half its radioactivity — then 28 years to lose half the remainder, ad infinitum.

Fallout affects all living things from cats to caterpillars, cabbages to commissars — everything that makes up the thin layer of life on planet Earth.

# Labor groups prepare to battle R. G. Menzies

By HAROLD TILLEY
Canadian Press Correspondent

CANBERRA (CP)— Arthur Augustus Calwell, controversial leader of the Australian Labor party, has a tough fight on his hands in his attempt to oust the Liberal-Country party coalition government of Robert Menzies in Saturday's general election.

But the aggressive, 65-year-old politician is no stranger to scrapping.

As leader of the opposition since 1959, Calwell has frequently been criticized for using street-corner tactics on the national political scene.

To bring down the Menzies government, Calwell's party must retain all the 45 seats it held in the lower house and take an additional 17 from the government. To do it, Calwell is stumping the country with a basket of promises ranging from equal pay for women to a complete national health service.

Complicating his fight is a splinter Labor group that charges Calwells party with being easy on Communists. Calwell insists that his party is irrevocably opposed to Communism.

**HARD WORKER**

While his tactics often come under fire, no one doubts Calwell's dedication or integrity. No man has worked harder or with more patience for his party.

He also is credited with considerable managerial and executive ability. He won particular praise when, as minister of immigration, he was chief architect of Australia's post-war immigration program.

Before becoming a member of Parliament in 1940, Calwell was a state civil servant in the agriculture and treasury departments and a Labor member of the Melbourne city council.

He sat in the House of Representatives only three years before being named minister of information. Two years later he took over the immigration portfolio as well, holding both posts until 1040 when the Labor government was ousted and Menzies came to power.

His tenure as head of the information department was marked by clashes in many directions. In war censorship activities, he was frequently at odds with sections of the press. There still is comment on the adroitness with which he manoeuvred press hostility into a mounting deluge of personal publicity.

**SPLINTER GROUP**

George Ronald Cole, 52-year-old leader of a splinter Labor group in Saturday's Australian elections, acquired a social sense early in life.

One of eight children, Cole was brought up in the potato-growing country on the island of Tasmania. A bright student, he worked his way through high school and college and developed a concern for improving social conditions.

He joined the Labor party at an early age but before taking up politics seriously he was better known as an athlete. As star centre of a senior rugby team, he once was named the Tasmanian Football League's "best and fairest" player.

He won a Senate seat in 1949 on an Australian Labor party ticket but soon became allied with the "groupers," a division of the party that was working to remove Communist influence from the trade union leadership.

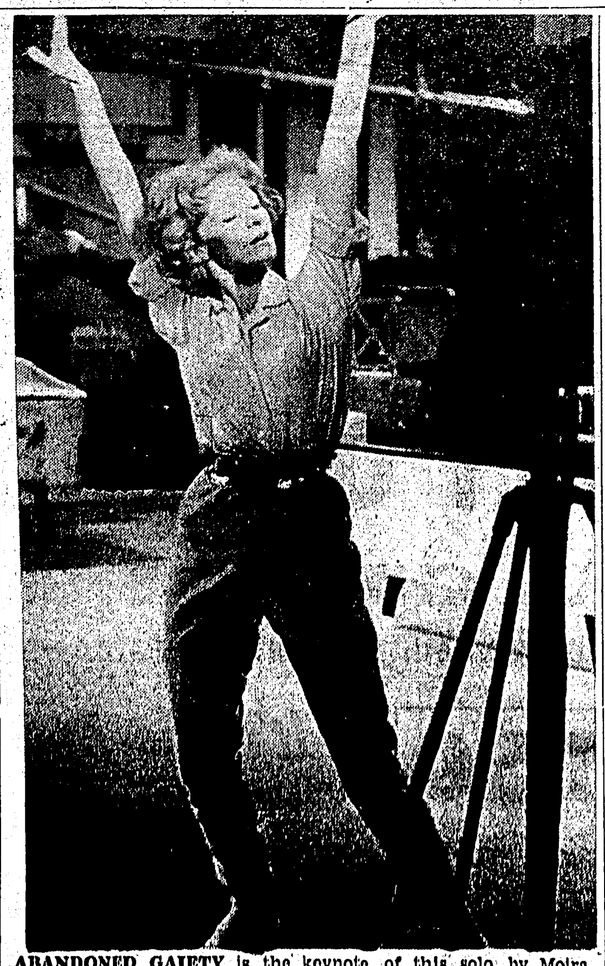
When the party hierarchy decided to break the movement in 1955, Cole pulled out and formed the Australian Labor anti-Communist party, later renamed the Democratic Labor party. It links with another splinter group called the Queensland Labor party.

**HOLDS OWN SEAT**

Although he is leading his party's fight in the general elections, Cole's own Senate seat is not at stake. Only half the 60 Senate seats are contested in each triennial general election, and Cole's term will not be up until 1964.

Although his party has no seats in the House of Representatives, it has been a continual thorn in the side of the main Labor party.

Cole accuses his old colleagues of "treasonous collaboration with the Communist enemies of Australia"—a charge denied by the Labor party.



**ABANDONED GAIETY** is the keynote of this solo by Moira Shearer as she dances on the deserted set of the film "Peeping Tom", a British thriller about a psychopathic killer. Moira as Vivian is one of the victims. — Rank Studios Photo

# British army lacks soldiers

LONDON (CP)—Britain's defence policy, hampered by a shortage of soldiers, is under attack at home and abroad.

Defence Minister Harold Watkinson says it can be repaired without resorting again to conscription. NATO allies and the Labor opposition are doubtful and some say the policy should be rebuilt from the bottom.

The government's diagnosis of its military ills, and prescribed treatment, will be outlined in the annual, white paper on defence next February.

At the heart of the trouble is lack of sufficient army manpower in the ranks of the signals, service corps, ordnance, electrical and mechanical engineers.

As Prime Minister Macmillan told the House of Commons recently, the army's weakness is "not in the teeth but in the tail."

Reasons for the miscalculations that brought about this state of affairs are many and Britain is not alone responsible.



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