

Mines and Resources will announce the government decisions in the House of Commons.

2. (c) The Canadian Dairy Commission financed two research projects in this area. The benefits that may accrue to the agricultural industry are:
- (1) Positive use of a product considered to be a waste and environmental problem.
  - (2) Production of energy, and considerations regarding improved use.
- (i) These projects consisted in studying:
- (1) The fermentation of whey for the manufacture of alcohol.
  - (2) The fermentation of whey for the manufacture of gas.
- (ii) Conclusion of research by ACP Marketing and Sodispro:
- (1) Technically, there is no particular problem in obtaining alcohol through the fermentation of lactose (sugar in dairy products).
  - (2) Alcohol obtained from whey is suitable for use in alcoholic beverages and in mixtures of 10 per cent alcohol to gasoline.
  - (3) Present distillers are not very interested in stocking up with whey because of market uncertainties.
  - (4) Alcohol manufacture is attractive at first sight in that it offers interesting profits.
  - (5) The authors make a comparison between lactose and alcohol manufacture.
  - (6) The production of alcohol through the fermentation of whey would be profitable only if co-operation is obtained from Canada's various liquor boards.
  - (7) For the following reasons, it was recommended (1978) that attempts not be made to use whey as a source of alcohol for the beverage market:
    - 7.1 The market is highly controlled and the rules of the game are often changed very quickly.
    - 7.2 The potential production of a plant like Sodispro represents 20 per cent of the present Canadian market.
    - 7.3 Possible consumer reactions.
    - 7.4 Uncertainty of the market and uneconomical returns at current prices.
    - 7.5 A decision of this nature could cause an increase in the price of powdered whey.
  - (8) The production of alcohol from whey was considered possible but not very profitable under existing economic conditions (1977).

### Order Paper Questions

- (9) This report includes an analysis of the possibility of fermenting the ultrafiltrate of concentrated whey (through ultrafiltration) and the ultrafiltrate of skim milk, and an analysis of the effect of temperature on the rate of fermentation of the ultrafiltrate. Certain parameters (pH, temperature, total solids) are also determined.
- (iii) This research was carried out by:
- (1) ACP Marketing, Montreal.
  - (2) Sodispro, Saint-Hyacinthe.
3. Not applicable.

### SECRETARY OF STATE FOR EXTERNAL AFFAIRS—TRAVEL

#### Question No. 1,045—Miss MacDonald:

1. When and for what occasions has the present Secretary of State for External Affairs used (a) commercial transportation (b) ministerial aircraft?
2. For each occasion, who accompanied the minister from his (a) non-departmental (b) departmental staff and what was the cost?
3. Did the minister use regularly scheduled DND flights, and, if so (a) on what dates (b) for what reason or occasion (c) was the regular schedule altered (d) were any DND personnel bumped by the minister or his staff?

**Hon. Mark MacGuigan (Secretary of State for External Affairs):** In so far as the Department of External Affairs is concerned the reply is as follows: the answers to the first two questions and to parts (a) and (b) of the third question are attached. Regarding parts (c) and (d) of the third question, the minister travelled aboard a DND flight to attend the NATO ministerial meeting in Brussels on May 11, and returned on a DND flight May 14. The schedule was altered for the Minister and the Deputy Minister of National Defence to allow them to land directly in Brussels, the site of the NATO Conference. No DND personnel were bumped. The above answer does not include information about regular trips to and from the minister's constituency on the House of Commons account.

Date	March	Cost	TPT
10	Event: Dinner for Paul Martin given by province of Ontario Ottawa/Windsor/Ottawa Passengers: SSEA	492	MOT
11/12	Event: Funeral/Father McCor-kell, Toronto Ottawa/Toronto/Wind-sor/Ottawa (No commercial flights available to meet time-table) Passengers: SSEA, C. Momotiuk (non-departmental staff)	610	MOT
24	Event: ACCT meeting, Paris Ottawa/Mirabel Mirabel/Paris	256	MOT
28	Paris/New York New York/Windsor Passengers: SSEA, C. Anderson (non-departmental staff) V. Turner, A. Simard (departmental staff)	6,932 792	COMM COMM