

Shortly afterwards, a new co-operative agreement was arranged between the two countries called the *ISIS* (International Satellites for Ionospheric Studies) programme. Canada assumed responsibility for the design and construction of a further four ionospheric satellites. The series will be launched at intervals during the minimum and maximum of the present solar cycle with *ISIS* "B" and "C" liftoffs scheduled at about one year intervals.

At the time the agreement was made, *Alouette I* had been operating for about six months. Although none of its redundant units had been needed, its ultimate life was unknown. The spacecraft is still operating and providing valuable data.

It was decided to employ *Alouette I*'s backup flight model as the first satellite in the new *ISIS* series. Called *Alouette II*, it was modified substantially to repeat and to improve the experiments carried in *Alouette I* and to operate in an elliptical orbit.

The *Alouette II*, which resembles its predecessor outwardly, was accompanied into space by the NASA *Explorer XXXI* satellite. These two spacecraft were complementary and a mission requirement was that they should be in close orbital proximity for at least a month after launch. This was necessary so that experiments conducted in each spacecraft could be performed coincidentally both in time and in space.

Alouette II is a substantially different spacecraft from Canada's first satellite, mainly because it follows an elliptical orbit rather than the circular orbit of *Alouette I*. It is still orbiting earth and providing upper atmospheric data.

DISCONTENTED COWS

Many of Canada's dairy cattle are suffering from a lack of phosphorus in their diets, according to Dr. D.E. Waldern, a nutritionist on the staff of the Canada Department of Agriculture's Agassiz (British Columbia) Research Station. The deficiency prevents the animals from reaching peak production, affects their digestion by hampering their use of energy and causes delayed and abnormal heat periods and lowered rates of conception.

Dr. Waldern says that the phosphorus needs of a cow depend on three factors - the weight of the cow, the amount of milk she is producing and the amount of phosphorus she obtains from feeds. He suggests that farmers feed a calcium-phosphorus supplement.

CONSTITUTIONAL CONFERENCE (Continued from P. 2)

Most provinces recognize the need to grant such rights to the individual. Some provinces have already adopted either a charter of human rights or legislation to protect certain freedoms, and other provinces intend to follow suit shortly.

But the citizen's protection remains incomplete as these are isolated efforts. Why not unify and consolidate them?...

BILINGUALISM

We believe that language rights are essential not only for the individual but for the strength and unity of this country. Both French-speaking and English-speaking Canadians must enjoy the fullest rights of citizenship. Wherever they live, they must feel at home.

Our policy of bilingualism has been widely misunderstood. It does not mean that every English-speaking Canadian must learn to speak French, any more than it means that every French-speaking Canadian must learn to speak English. It means that every Canadian will have access to public education in either official language, and will be free to use either language in dealing with the Federal Government and other public bodies, in all areas of the country where the size of the minority justifies it. Only when this has been achieved will all Canadians, of both languages, feel that the whole of Canada is their country....

Since our conference last year, several provinces have adopted measures to extend language rights. The Federal Government has introduced an Official Languages Bill which is intended to deal with matters within the federal jurisdiction. We realize that the extension of language rights across the country may cause technical and financial problems. We are ready to discuss these problems with the provinces, and to consider any proposals for assistance in solving them.

Now that we have taken the first steps in this direction, we cannot afford to hesitate or fall back. Language rights are too important to too many Canadians to be left without adequate protection in our law. We must place them beyond question and beyond attack by guaranteeing them to all Canadians in our revised constitution....