

IJC TO STUDY GREAT LAKES WATER LEVELS

The Secretary of State for External Affairs announced on October 8 that the Governments of Canada and the United States of America had jointly placed before the International Joint Commission a reference on the level of waters in the Great Lakes. The text follows:

In order to determine whether measures within the Great Lakes basin can be taken in the public interest to regulate further the levels of the Great Lakes or any of them and their connecting waters so as to reduce the extremes of stage which have been experienced, and for the beneficial effects in these waters describing hereunder, the Governments of Canada and the United States have agreed to refer the matter to the International Joint Commission for investigation and report pursuant to Article IX of the Boundary Waters Treaty of 1909.

It is desired that the Commission study the various factors which affect the fluctuations of these water levels and determine whether in its judgement action would be practicable and in the public interest from the points of view of both Governments for the purposes of bringing about a more beneficial range of stage for, and improvement in:

- a) domestic water supply and sanitation;
- b) navigation;
- c) water for power and industry;
- d) flood control;
- e) agriculture;
- f) fish and wildlife;

TV SPOTTER FOR USE OF INFANTRY

A flying television-set designed to view enemy-held terrain is now undergoing feasibility tests by Canada's Defence Research Board. The device has been called a "periscope" by its inventors at the Canadian Armament Research and Development Establishment (CARDE), Valcartier, Quebec, because it does, in fact, look like a combination of a periscope and a helicopter.

The periscope, which can be operated from a vehicle such as the Military Personnel Carrier, is controlled from the ground by a coaxial cable containing power and other electrical lines. A 4½-foot helicopter rotor is used to lift the camera into the air. The airborne elements weigh 50 pounds; the complete system weighs 500 pounds.

AID TO SUPPORTING WEAPONS

Designed to provide forward troops of battalion and smaller units with a clear view of the ground ahead for relatively long ranges, the periscope should also help to improve the performance of supporting weapon systems. By providing clear coverage of most types of terrain, it could keep correct firing orders.

Through its closed-circuit television system the periscope can give an instantaneous 360-degree look at enemy movements and equipment.

Employment of the system will at first be under daylight conditions, though CARDE scientists are

- g) recreation; and
- h) other beneficial public purposes.

In the event that the Commission should find that changes in existing works or that other measures would be practicable and in the public interest in light of the foregoing purposes, it should indicate how the various interests on either side of the boundary would be benefited or adversely affected thereby. The Commission should estimate the cost of such changes in existing works or of such other measures and the cost of any remedial works that might be found to be necessary and make an appraisal of the value to the two countries, jointly and separately, of such measures. For the purpose of assisting the Commission in its investigations and otherwise in the performance of its duties under this reference, the two Governments will, upon request, make available to the Commission the services of engineers and other specially qualified personnel of their governmental agencies and such information and technical data as may have been acquired or as may be acquired by them during the course of the investigation.

The two Governments have agreed that when the Commission's report is received they will consider whether any examination of further measures which might alleviate the problem should be carried out, including extending the scope of the present reference.

The Commission is requested to submit its report to the two Governments as soon as may be practicable...

hopeful that improvements in the system will allow it to "see" at night as well.

The periscope is ruggedly constructed, and its simplicity will require only a single operator, who will require no special skills. Its small size would make it a difficult target if detected.

OTHER USES

In addition to its ability to monitor enemy action and help supporting ground-fire select targets, the periscope may also be useful in guiding anti-tank missiles to their targets. Its potential also embraces early warning of slow speed, low-flying aircraft.

A "bread board" model of the periscope was tested by CARDE this Spring to ensure the scientific feasibility of the project during the pre-development phases. Another model is now under construction for further and more exacting trials.

ICAO ASSEMBLY TO MEET IN CANADA

The Assembly of the International Civil Aviation Organization will convene in Montreal on 22 June 1965 and will last for about four weeks. This session, the Assembly's fifteenth since the Organization was founded, will be preceded and followed by short meetings of the ICAO Council.

The headquarters of ICAO have been located in Montreal since 1947.