



—Globe and Mail Photo

arrying posters demanding cancellation
f the planned U.S. nuclear test blast
n Amchitka Island in the Aleutians,
000 people demonstrated in front of
he U.S. consulate in Toronto. This was

one of a number of demonstrations
held in Canada urging the U.S.
Administration to "Stop Amchitka."
The test explosion was detonated
on Amchitka November 6.

esides banning tests in the non-contro-
ersial environments, prohibits those "in
ny other environment, if such explosion
auses radioactive debris to be present
utside the territorial limits of the State
nder whose jurisdiction or control such
xplosion is conducted".

Since the mid-1960s, in the ENDC
nd its successor body, the Conference of
he Committee on Disarmament (CCD)
a Geneva, and in the United Nations
eneral Assembly, various suggestions
ave been put forward to close the veri-
cation gap and to facilitate an under-
ground test ban to complete the PTB.
Among the most important have been: (a)
he Swedish delegation's proposal of 1965
or the creation of a "detection club" to
romote international co-operation in the
xchange of seismic data; (b) the U.A.R.
uggestion for a "threshold treaty" ban-
ing underground tests above a certain
evel (in seismic magnitude), together
with a moratorium on testing below this
evel; (c) a system for "verification by
hallenge", i.e. non-obligatory, on-site
nspection on the option and at the invita-
ion of the "challenged" state to suppl-
ent seismological identification tech-
iques, which was first put forward by the
Swedish delegation in 1966 and embodied
n their draft CTB tabled in 1969; and
d) the British suggestion of 1968 that
he implementation of a CTB, once it was

agreed upon, might proceed progressively
through accepted annual quotas of under-
ground test explosions with the scale de-
scending to nil in a period of four or five
years.

For its part, Canada has made a
major effort over the last several years to
try to break the deadlock on verification
through the development of international
co-operation in the identification by seis-
mological means of underground tests —
that is, distinguishing them from natural
earthquakes. The resources of Canadian
diplomacy and seismic research have for
a considerable time been directed toward
the ending of nuclear testing in all en-
vironments. As far back as 1962, the then
Department of Mines and Resources set
up seismographic stations designed to im-
prove techniques for the detection and
identification of underground events, and
Dr. Kenneth Whitham, chief of the seis-
mology division of the present Depart-
ment of Energy, Mines and Resources, and
his associates have, with rather modest re-
sources, put Canada in the van of inter-
national seismological verification re-
search. The results of this research have
been tabled in the CCD and are being
made available in scholarly journals and
official publications.

In addition, Canada has taken the
initiative of urging the two major nuclear
powers — the United States and the