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The Joint Arctic Weather Stations: Science and Sovereignty in the High Arctic, 1946-1972

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THE JOINT ARCTIC WEATHER STATIONS
Science and Sovereignty in the High Arctic, 1946-1972

Daniel Heidt and P. Whitney Lackenbauer
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NORTHERN LIGHTS SERIES

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Science and Sovereignty in the High Arctic, 1946–1972

Daniel Heidt and P. Whitney Lackenbauer

Northern Lights Series
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To the JAWS personnel who served their continent
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Acknowledgements

This book reflects a truly cooperative effort. The origins of this book lay in Whitney Lackenbauer’s broader initiative to re-evaluate Canadian-American relations in the early Cold War Arctic. Peter Kikkert and Daniel Heidt both saw opportunities to interrogate the Joint Arctic Weather Stations (JAWS) experience in their graduate research, and shared Whitney’s assessment that a comprehensive study of the program was needed. Peter and Whitney published an article on Task Force 80, as well as various book chapters on Canada-US relations and Arctic sovereignty, that informed our early thinking about JAWS. Daniel also published an initial assessment of the program’s impacts on Canadian sovereignty in a book chapter. Although Pete’s other commitments eventually led him to withdraw from the project, he generously shared ideas and research (including preliminary narratives that helped lay the groundwork for chapters 2 and 9). We are grateful for his enthusiasm, intellectual support, and friendship. We also thank Shelagh Grant for sharing a copy of her paper “Weather Stations, Airfields, and Research in the High Arctic, 1939–1959: An American Perspective,” presented at the Canadian Historical Association Annual Meeting on 27 May 1990, and, subsequently revised as a draft, two-part article on “American Defence of the Arctic, 1939–1960.” Her broad and deep knowledge of Arctic history, coupled with her passion and commitment to challenge assumptions, inspired this work.

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More generally, the JAWS and HAWS personnel who agreed to be interviewed, shared their photographs and stories, and answered our many questions must be thanked. This is their history, and we hope that their experiences are well reflected in the pages that follow.

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PERMISSION NOTE

We are grateful for permission to incorporate material from the following publication:

Acronyms

AAF    Army Air Forces
ABC    America-Britain-Canada
ACC    Air Coordinating Committee
acc.    accession
ACND   Advisory Committee on Northern Development
ADTIC  Arctic, Desert and Tropic Information Centre (USAAF)
AES    Atmospheric Environment Service
AINA   Arctic Institute of North America
Alta.  Alberta
ARCTOPS Arctic Operations Study
ATC    Arctic Training Centre
BC     British Columbia
BMEWS  Ballistic Missile Early Warning System
BT     bathythermograph
c.     circa
C      Celsius
CAD    Canadian dollars
CAE    Canadian Arctic Expedition
CAF    Canadian Armed Forces
Canol  Canadian Oil
CBC    Canadian Broadcasting Corporation
CGS    Canadian Coast Guard Ship
CDC    Cabinet Defence Committee
CFB    Canadian Forces Base
CFS    Canadian Forces Station
CGS    Canadian Government Ship
CMS    Canadian Meteorological Service
CNO    Chief of Naval Operations
Cong.  Congress
CRREL  Cold War Regions Research and Engineering Laboratory
CWC    Cabinet War Committee
D.C.   District of Columbia
DCASS  Documents on Canadian Arctic Sovereignty and Security
<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>DCER</td>
<td>Documents on Canadian External Relations</td>
</tr>
<tr>
<td>DEA</td>
<td>Department of External Affairs</td>
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<tr>
<td>DEW Line</td>
<td>Distant Early Warning Line</td>
</tr>
<tr>
<td>DEXAF</td>
<td>Department of External Affairs</td>
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<tr>
<td>DFC</td>
<td>Distinguished Flying Cross</td>
</tr>
<tr>
<td>DHH</td>
<td>Directorate of History and Heritage</td>
</tr>
<tr>
<td>DMR</td>
<td>Department of Mines and Resources</td>
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<tr>
<td>DNANR</td>
<td>Department of Northern Affairs and National Resources</td>
</tr>
<tr>
<td>DND</td>
<td>Department of National Defence</td>
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<tr>
<td>DoT</td>
<td>Department of Transport (Canadian)</td>
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<tr>
<td>Dr.</td>
<td>Doctor</td>
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<td>DRB</td>
<td>Defence Research Board</td>
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<tr>
<td>ed.</td>
<td>edition/editor</td>
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<tr>
<td>ESSA</td>
<td>U.S. Environmental Science Services Administration</td>
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<tr>
<td>ExO</td>
<td>Executive Officer</td>
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<td>f.</td>
<td>file</td>
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<td>F</td>
<td>Fahrenheit</td>
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<td>Figure</td>
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<tr>
<td>F/L</td>
<td>Flight Lieutenant</td>
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<td>F/O</td>
<td>Flying Officer</td>
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<tr>
<td>FRUS</td>
<td>Foreign Relations of the United States</td>
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<td>Ft.</td>
<td>Fort</td>
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<td>ft.</td>
<td>foot/feet</td>
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<td>Gen.</td>
<td>General</td>
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<tr>
<td>GMT</td>
<td>Greenwich Mean Time</td>
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<tr>
<td>HAWS</td>
<td>High Arctic Weather Stations</td>
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<tr>
<td>HBC</td>
<td>Hudson’s Bay Company</td>
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<tr>
<td>HMS</td>
<td>His/Her Majesty’s Ship</td>
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<td>Hon.</td>
<td>Honourable</td>
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<td>H.R.</td>
<td>House of Representatives</td>
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<td>hr</td>
<td>hour</td>
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<td>IGY</td>
<td>International Geophysical Year</td>
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<td>in.</td>
<td>inches</td>
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<tr>
<td>IPY</td>
<td>International Polar Year</td>
</tr>
<tr>
<td>JAWS</td>
<td>Joint Arctic Weather Stations</td>
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<tr>
<td>km</td>
<td>kilometres</td>
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<tr>
<td>K.P.</td>
<td>kitchen patrol/kitchen police</td>
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<td>LAC</td>
<td>Library and Archives Canada</td>
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</tbody>
</table>
lbs.  pounds
LCM  landing craft, mechanized
LCN  landing craft, navigation
LCVP  landing craft, vehicle, personnel
Lieut./Lt.  Lieutenant
Lt. Col./LCol  Lieutenant-Colonel
m  metres
Maj.  Major
MCC  Military Co-Operation Committee (Canada-United States)
met techs  meteorological technicians
MG  Manuscript Group
mi  miles
MIT  Massachusetts Institute of Technology
MPH  miles per hour
MV  Motor vessel
N  North
NARA  National Archives and Records Administration
NATO  North Atlantic Treaty Organization
n.d.  no date
no.  number
NORAD  North American Air Defence Command
NWT  Northwest Territories
OIC  officer in charge
Op  Operation
Ops. Bldg.  Operations Building
PBM  patrol bomber
PBY  patrol bomber (Consolidated Aircraft Co.)
PC  Privy Council
PCSP  Polar Continental Shelf Project
PEARL  Polar Environment Atmospheric Research Laboratory
pibal  pilot balloon
PISO  no pilot balloon observation, snowing
PIWI  no pilot balloon observation, high or gusty surface wind
PJBD  Permanent Joint Board on Defence
P.Q.  Province of Quebec
pt.  part
QTC  Qikiqtani Truth Commission
RAOB  Rawinsonde Observation
RAWIN  Rawinsonde
RCAF  Royal Canadian Air Force
RCAP  Royal Commission on Aboriginal Peoples
RCMP  Royal Canadian Mounted Police
RCN  Royal Canadian Navy
RCNR  Royal Canadian Naval Reserve
ret’d  retired
Rev.  Reverend
rev.  revised
RG  Record Group
SCR  Signal Corps Radio
SIPRE  Snow, Ice and Permafrost Research Establishment
S/L  Squadron Leader
SS  Steamship
SSEA  Secretary of State for External Affairs
SSHRC  Social Sciences and Humanities Research Council
temp.  temperature
TF  Task Force
trans.  translated
UK  United Kingdom
US / USA  United States of America
USAAF  United States Army Air Forces
USAF  United States Air Force
USCGS  United States Coast Guard Ship
USD  United States dollars
USN  United States Navy
USS  United States Ship
USSEA  Under-Secretary of State for External Affairs
USSR  Union of Soviet Socialist Republics
USWB  United States Weather Bureau
vol.  volume
W  West
WO2  Warrant Officer Second Class