Adventures from the Coldest Part of the Cold War

Brian Jeffrey – VE3UU / ex-VE8SK

A Special Presentation for…

The West Carleton Amateur Radio Club

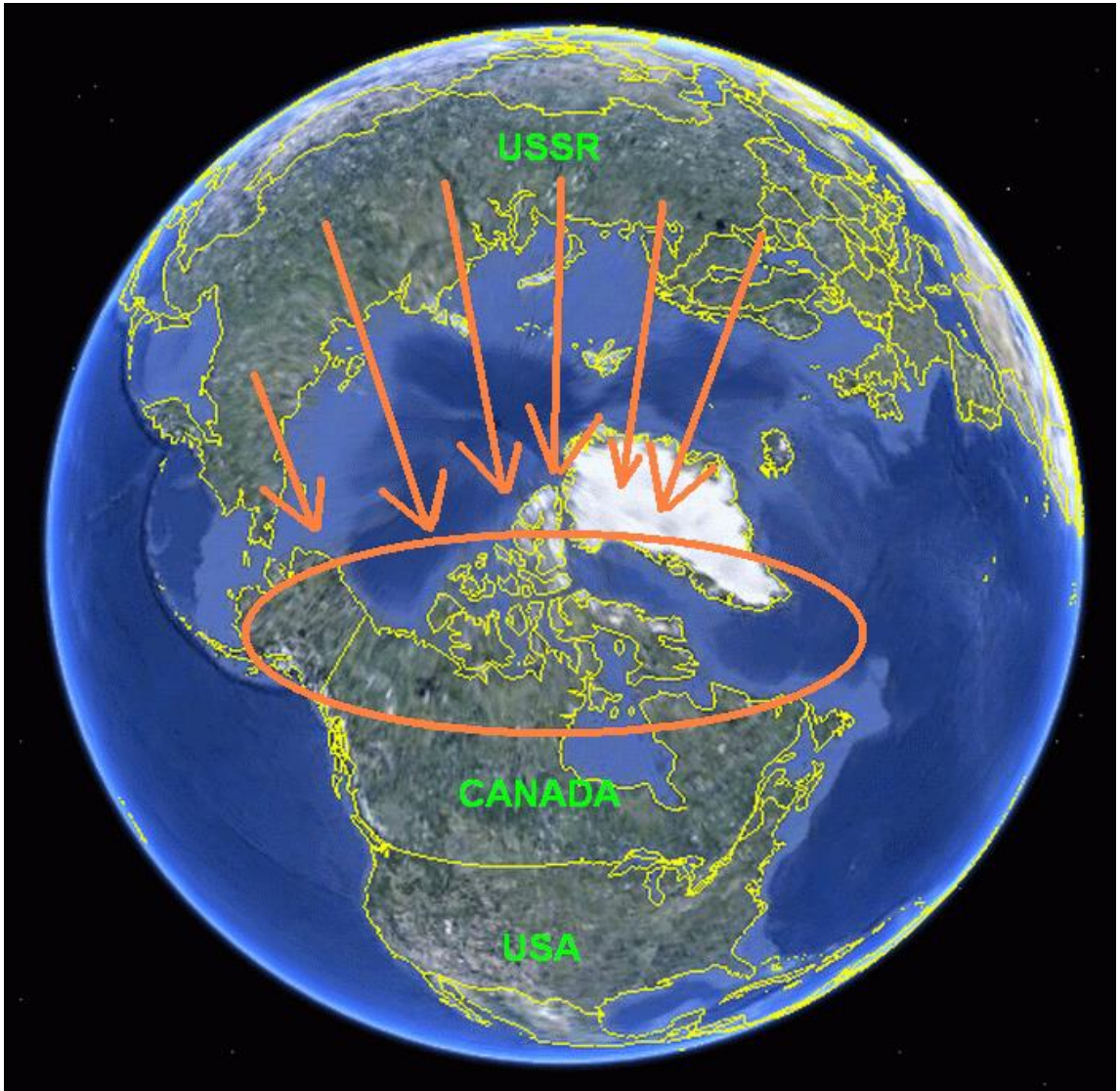
Agenda

- The DEWLine: What & Why
- Life on the Line
- Why go North?
- Story time
  (Tall tales from the frozen North)
- Going back “home”

What is (was) the DEWLine?

- **DEWLine = *D*istant *E*arly *W*arning Line**
- Chain of 58 manned radar stations
- Scattered across 2800 miles of nothing
- Built between 1955 and 1957
- Operational in August 1957
- Morphed into the North Warning System in 1993

The Necessity



The Thin Line

3 Types of DEWLine Stations

6 Main stations

48+ personnel

27 Auxiliary sites

16+ personnel

25 Intermediate sites

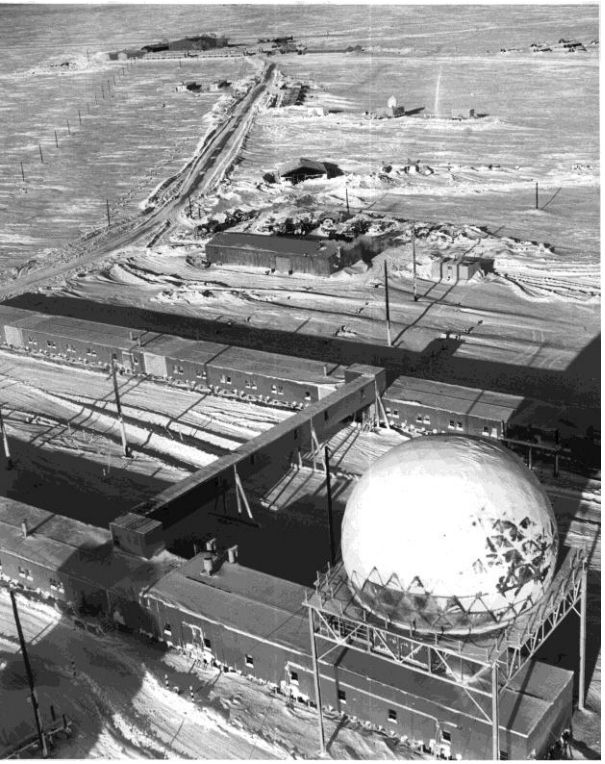
5+ personnel

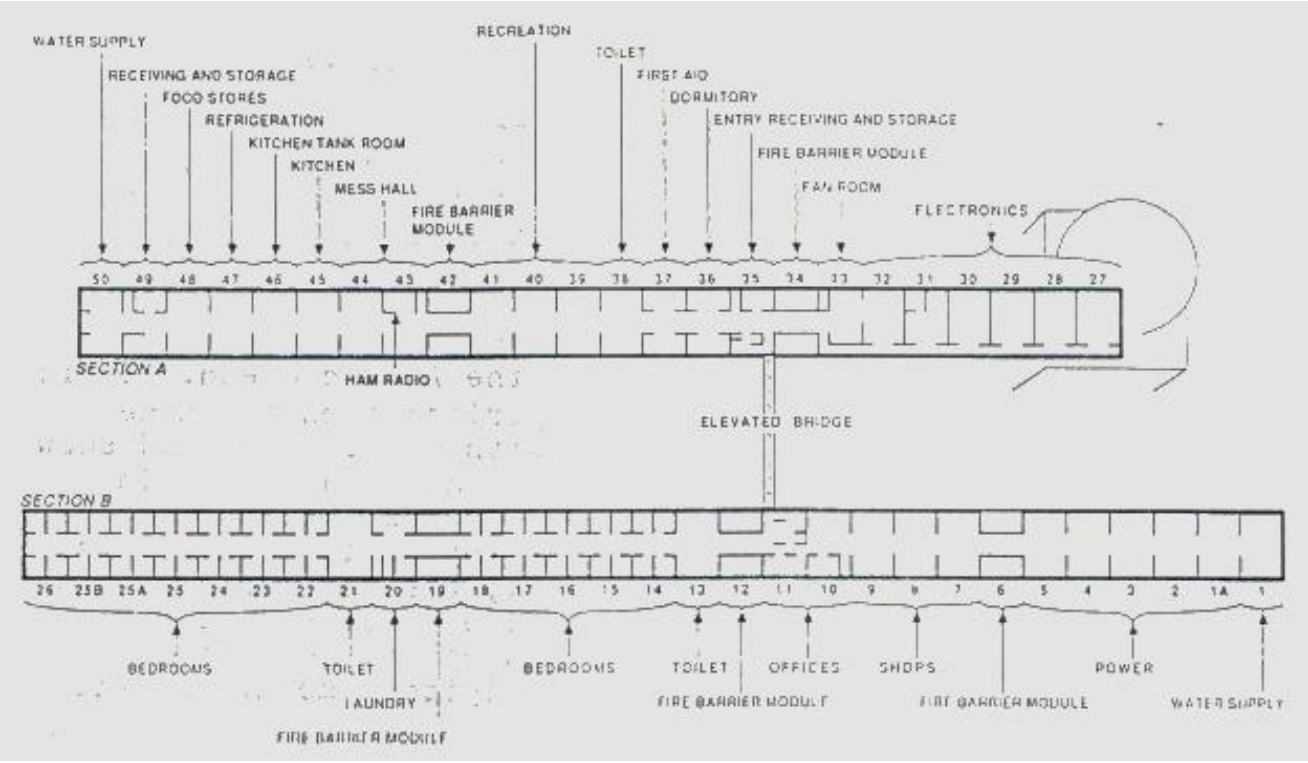
Taken out of service by 1963-4

Building a building

- Basic module: 28’ x 16’ x 10’ high
- Module trains
- I-Site: 5-modules (28 x 80 ft)
- Aux-Site: 25 modules (28 x 400 ft)
- Main-Site: 52 modules
  in two module trains

Typical Main Site

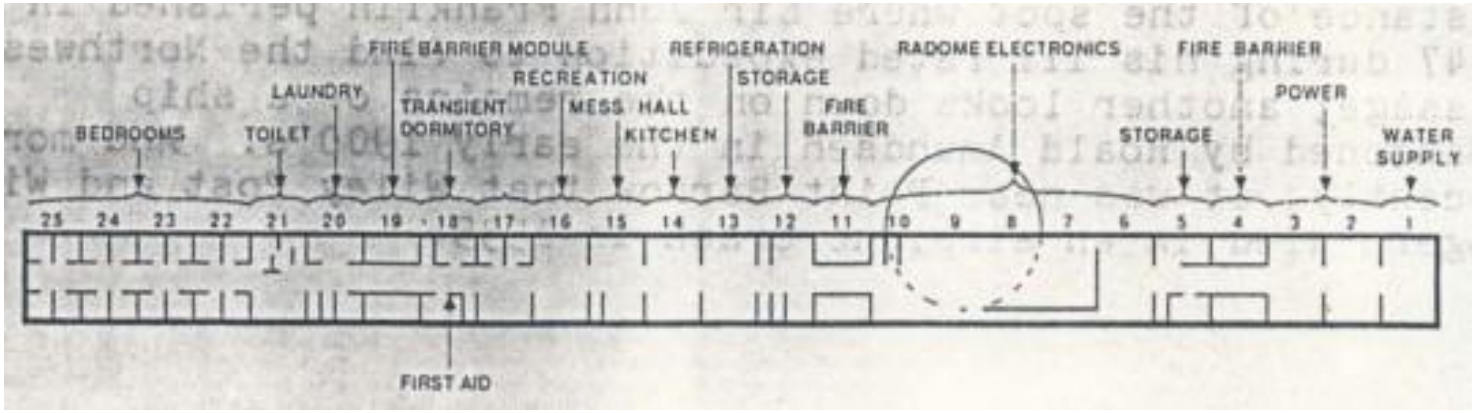




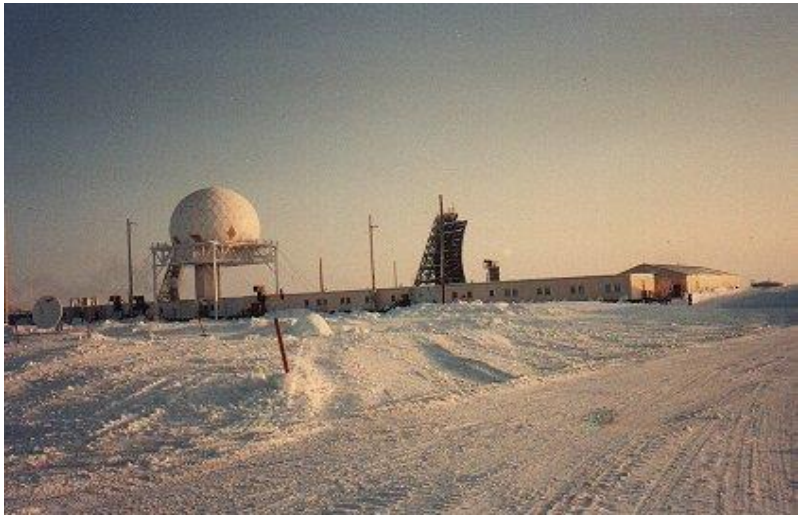
48 bedrooms
7-8 Radicians

Typical Auxiliary (Aux) Site…

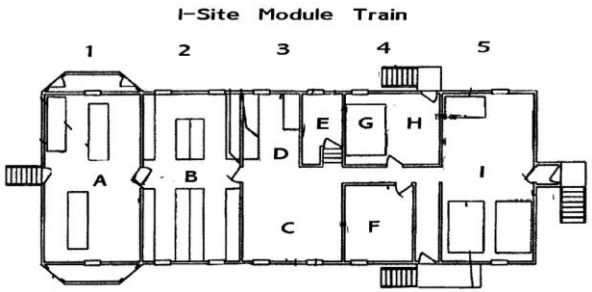
Station layout



16 Bedrooms
6-7 Radicians

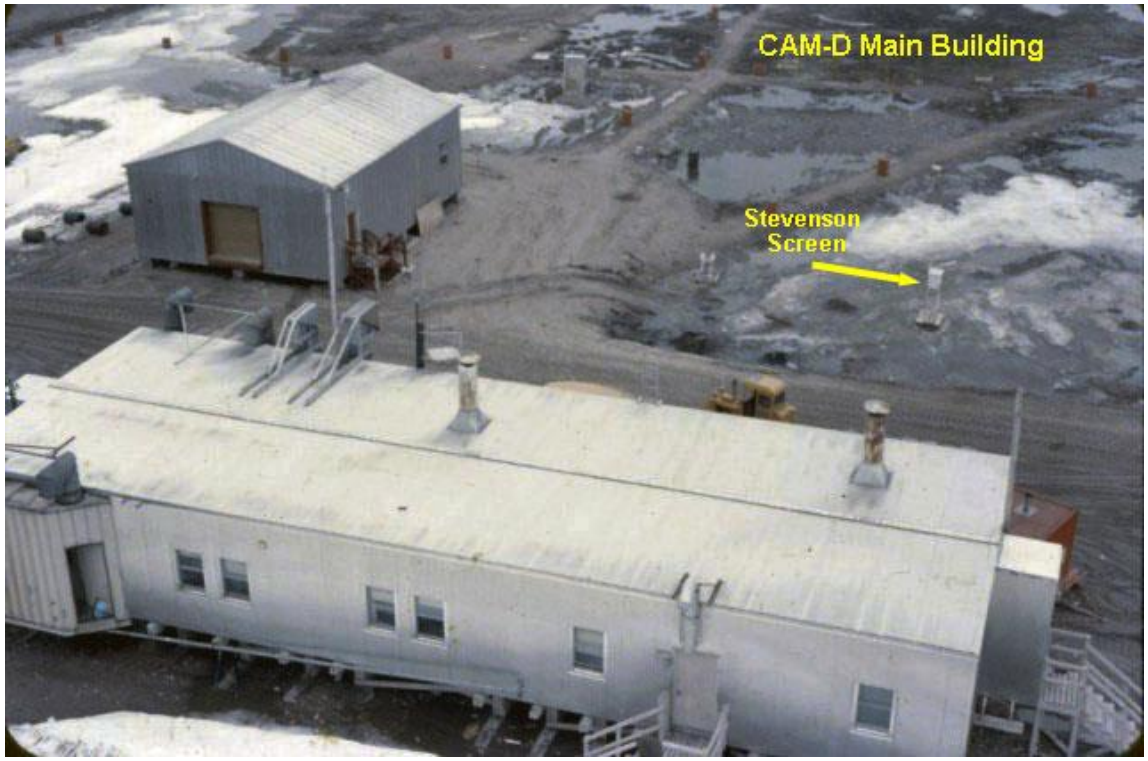


Typical Intermediate Site (I-Site)…



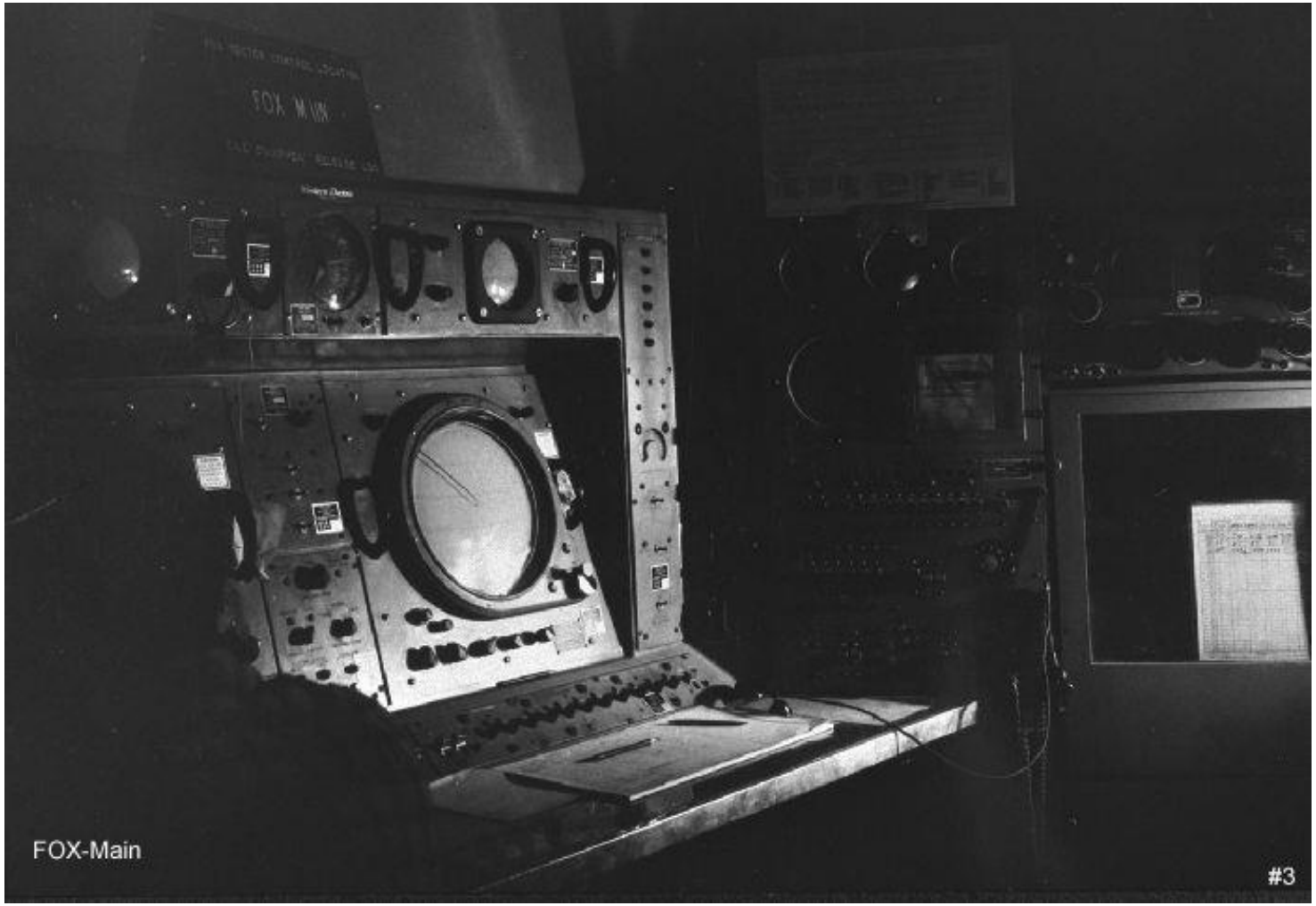
A = Power module
B = Electronic module
C = Living module
D = Kitchen
F = Sleeping quarters

Staff:
1- Station Chief
1- Radician
1- Mechanic
1- Cook
1- Eskimo

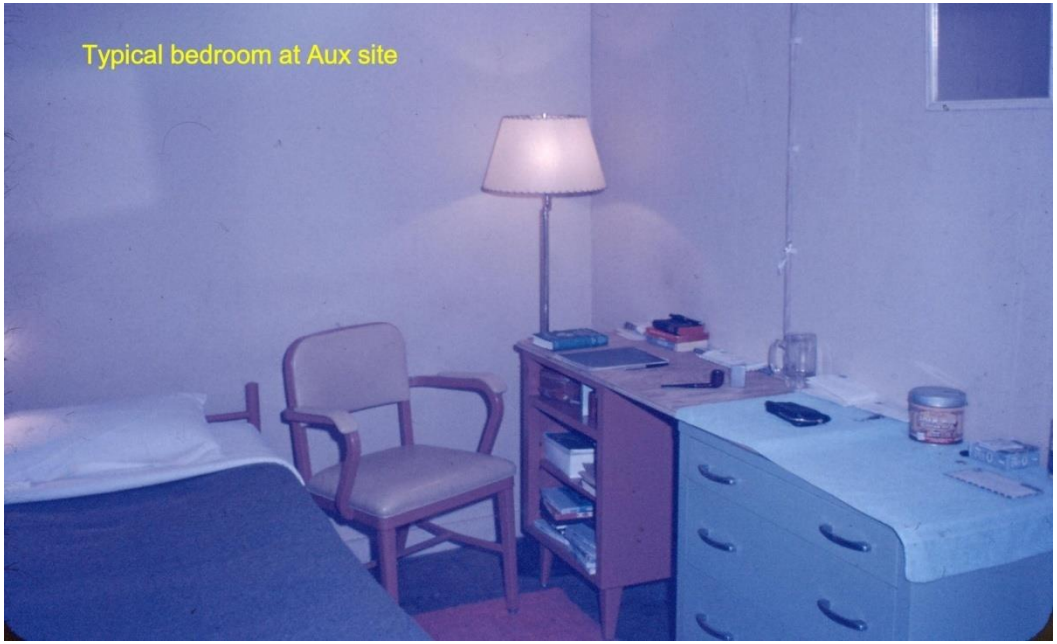


1 Shared bedroom.

My Workstation



Typical bedrooms



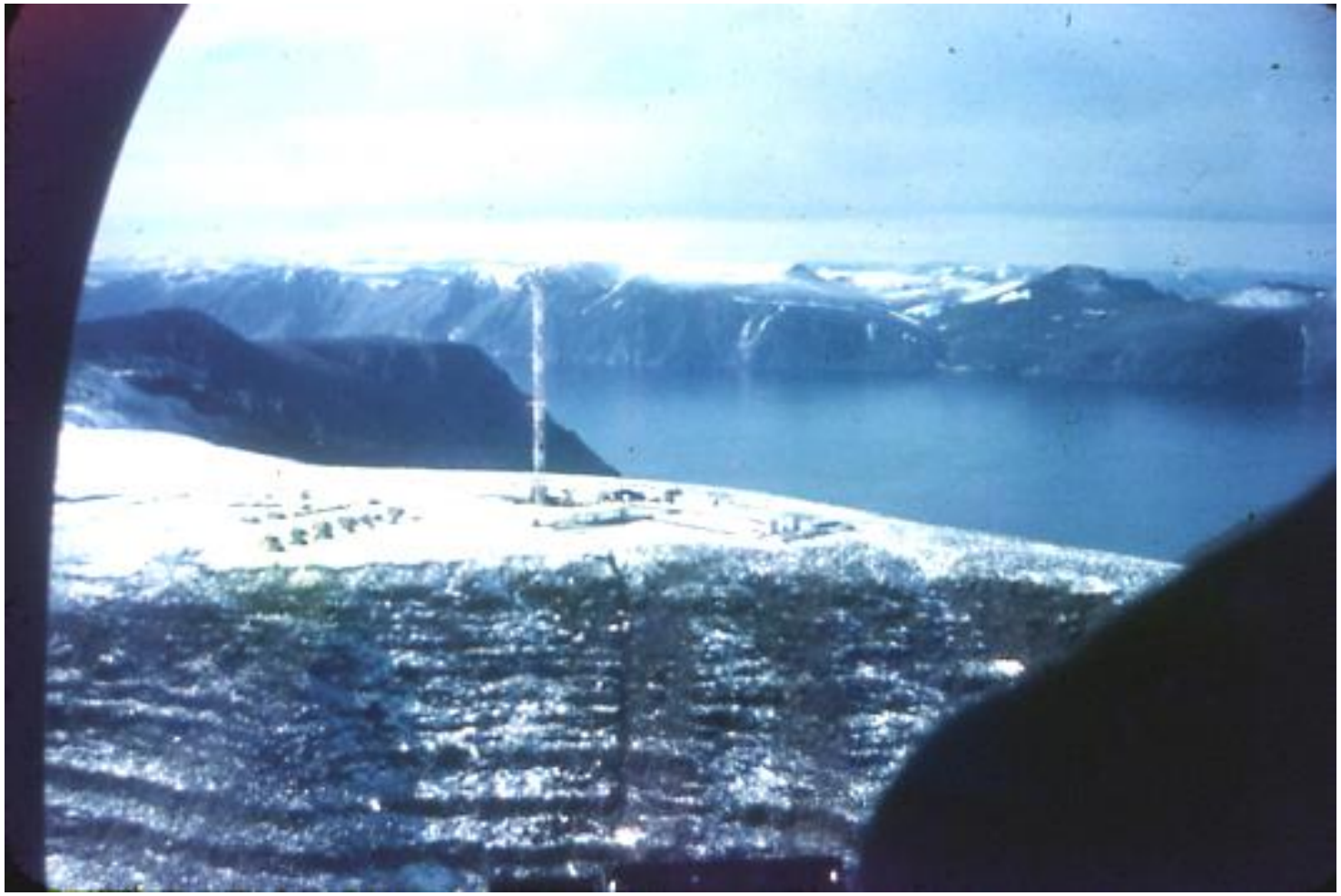
Recreation Module

Life on the Line

- 54 hour work week (six, 9-hour days)
- 6-month minimum stay
- No outside communications
- No TV, no radio
- No news
- Mail, once a week (maybe)
- Some creature comforts…
  - 3 first run movies/week
  - Incredible food

Middle of Nowhere

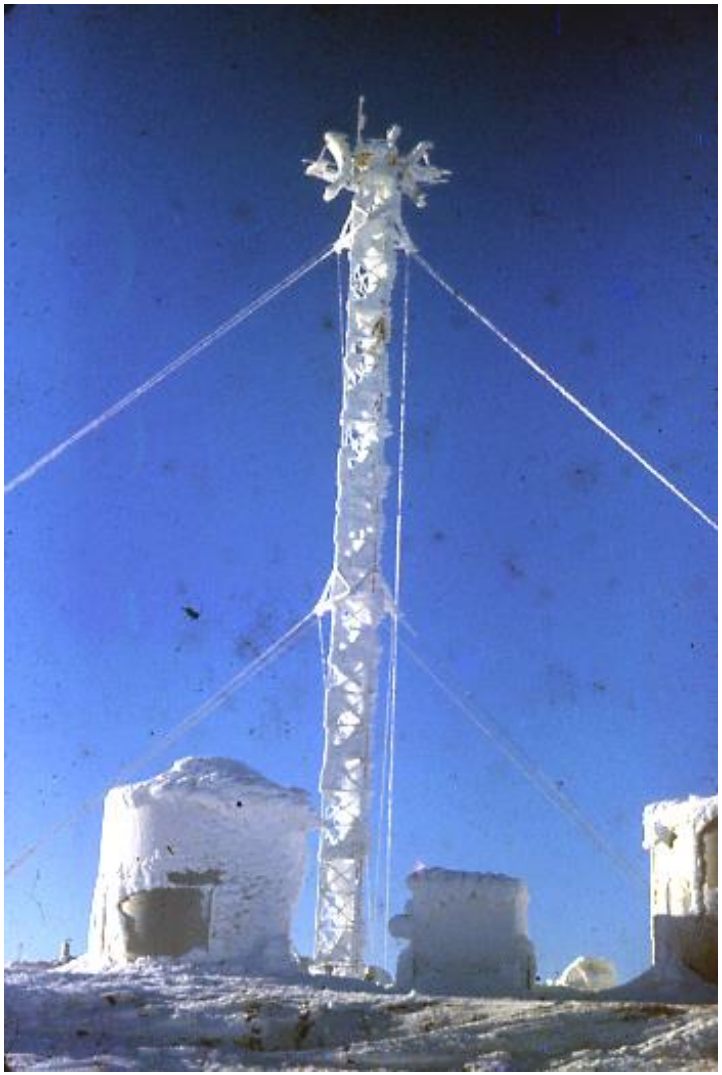
Edge of Nowhere



Find the Site (FOX-C)

Cold Personified

Unending Cold

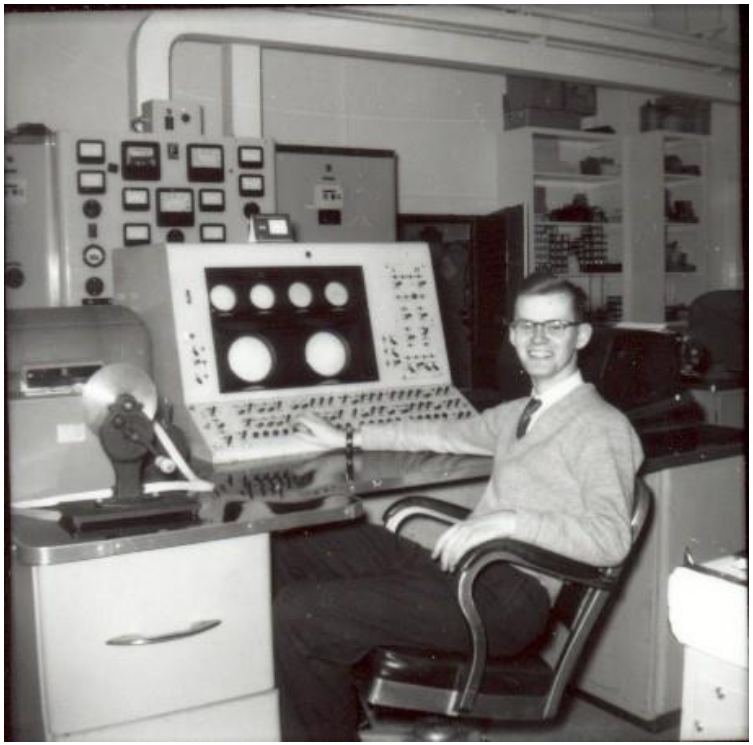


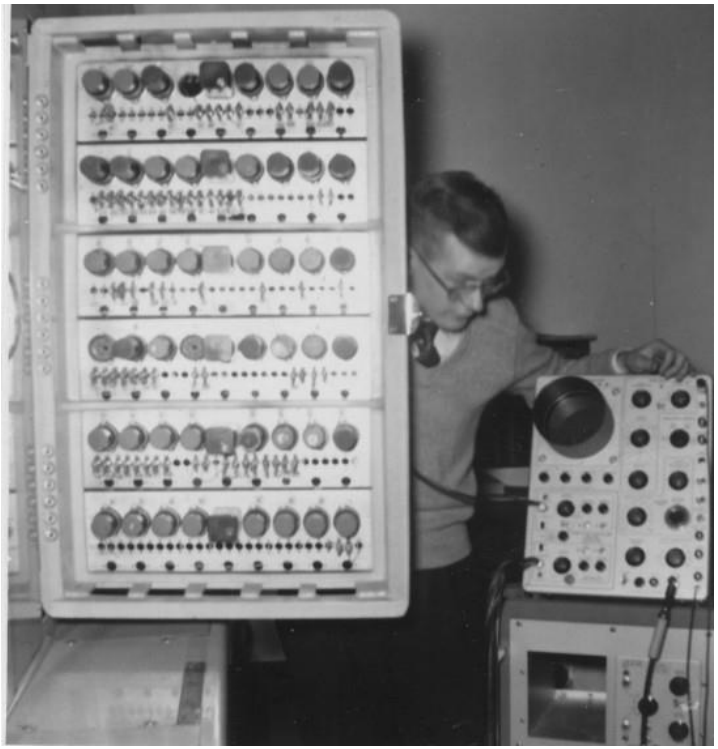
Why Do This?

$$$

National Research Council…

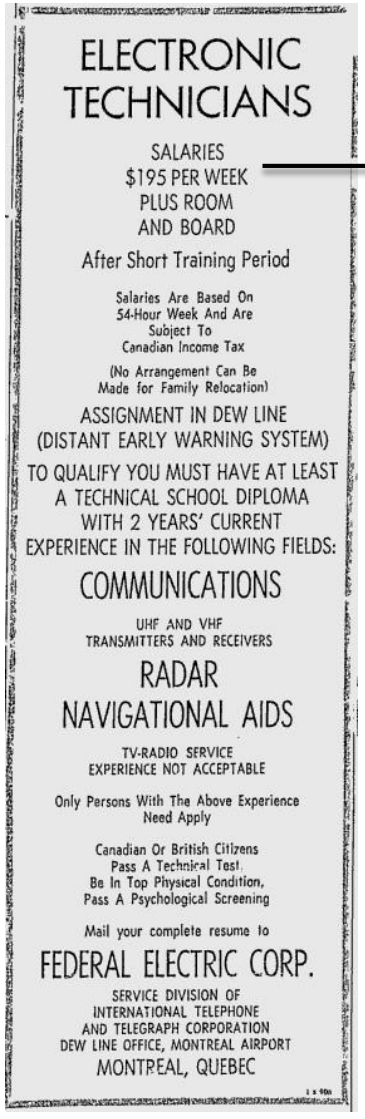
- Canada's first commercial digital computer
- Earning $2750/Annum ($53/week)
- Living at home





Financial Incentive

Montreal Gazette
January 1960 issue



ELECTRONIC TECHNICIANS

SALARIES
$195 PER WEEK
PLUS ROOM
AND BOARD

After Short Training Period

Salaries Are Based On
54-Hour Week And Are
Subject To
Canadian Income Tax

(No Arrangement Can Be
Made for Family Relocation)

ASSIGNMENT IN DEW LINE
(DISTANT EARLY WARNING SYSTEM)

TO QUALIFY YOU MUST HAVE AT LEAST
A TECHNICAL SCHOOL DIPLOMA
WITH 2 YEARS' CURRENT
EXPERIENCE IN THE FOLLOWING FIELDS:

COMMUNICATIONS

UHF AND VHF
TRANSMITTERS AND RECEIVERS

RADAR
NAVIGATIONAL AIDS

TV-RADIO SERVICE
EXPERIENCE NOT ACCEPTABLE

Only Persons With The Above Experience
Need Apply

Canadian Or British Citizens
Pass A Technical Test.
Be In Top Physical Condition,
Pass A Psychological Screening

Mail your complete resume to

FEDERAL ELECTRIC CORP.

SERVICE DIVISION OF
INTERNATIONAL TELEPHONE
AND TELEGRAPH CORPORATION
DEW LINE OFFICE, MONTREAL AIRPORT
MONTREAL, QUEBEC

$195/week!

The adventure begins…

- Streator Ill for 12 weeks of training
- Non-descript town 90 miles south of Chicago
- Billeted at the Columbia Hotel, AKA *Tiltin Hilton*

In the Middle of a Cornfield…

- 12 miles outside town, hidden out of sight
- Was the secret training facility
- Decommissioned in 1982. Now a derelict

Northward bound…

- Issued with my Arctic gear in Montreal
- Departed Dorval July 28, 1960 for Hall Beach, NWT
- 12 hour, non-stop, flight in a DC-4, CF-IQM

CF-IQM Still Flies Today

Hall Beach NWT, FOX-Main…

- Had my 20th birthday.

Lateral Flights

Douglas DC-3

Curtis Wright C-46

Luxury Arctic Air Travel…

1st Home: Pelly Bay…

- Code name: **CAM-4**
- 2 Hours west of Hall Beach (FOX Main)

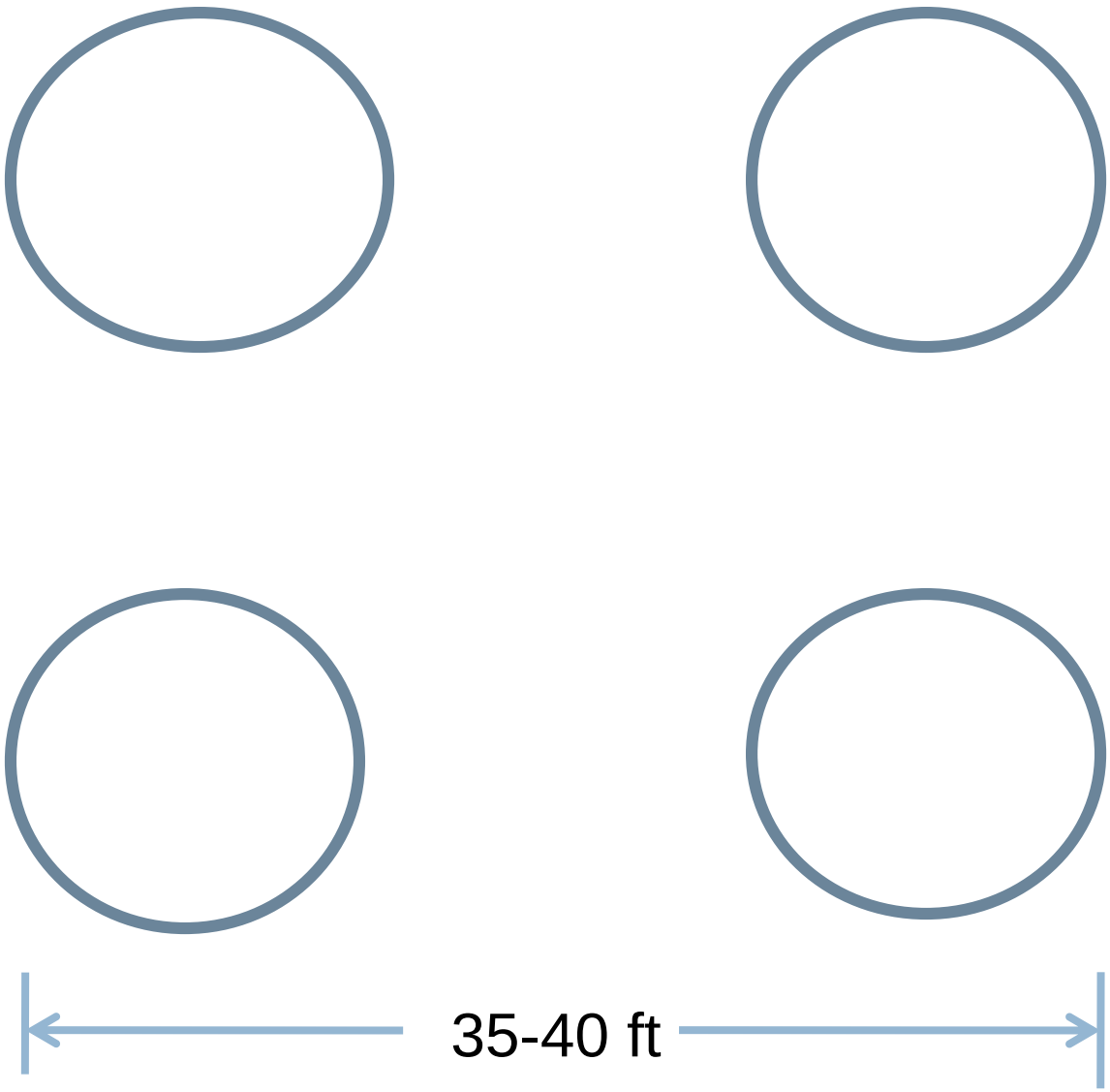
Story Time

Christmas at the *Real* Pelly Bay

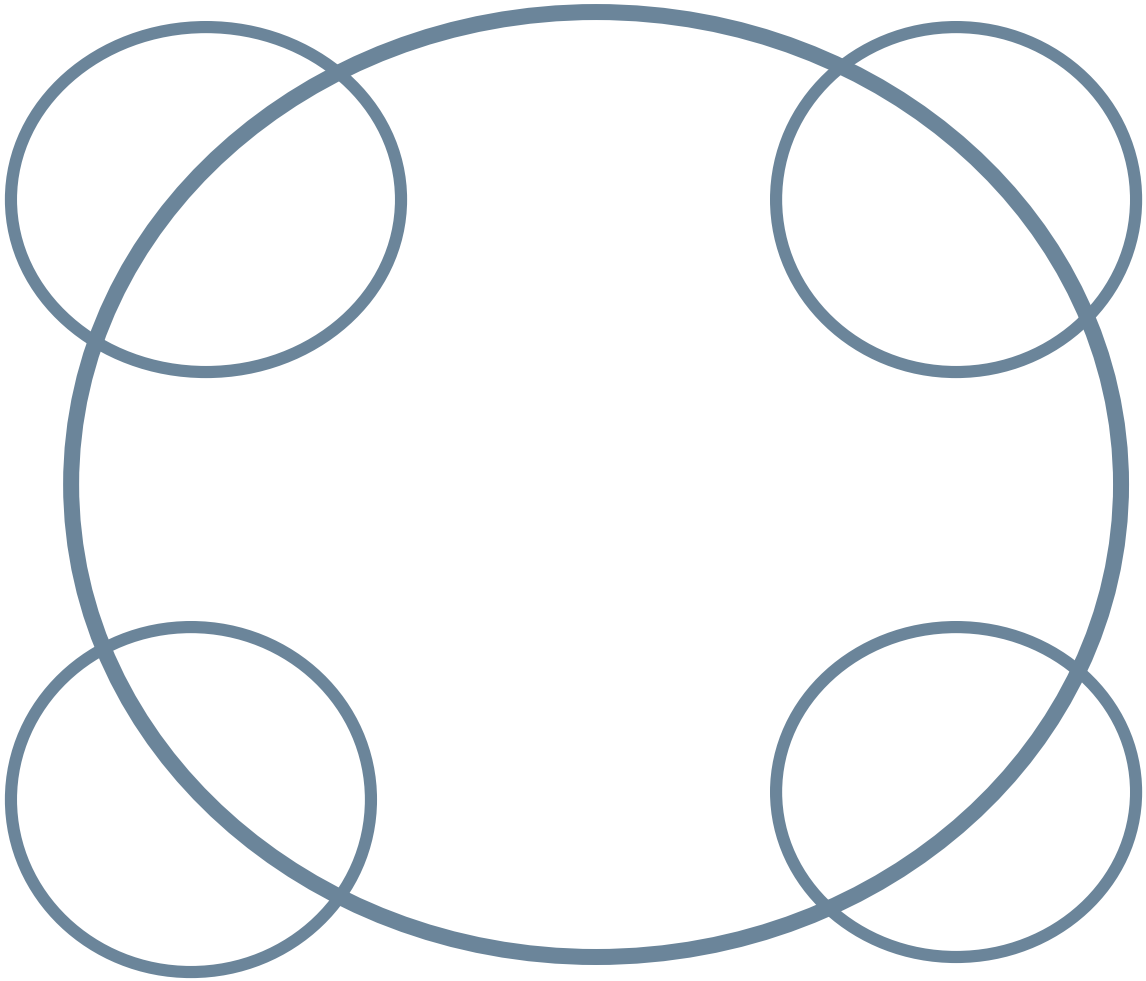
- Starring:
  - Father Vandeveld, RC priest
  - 120 Eskimos (extras)
  - 5 strangers (From CAM-4)
- Featuring:
  - World’s largest igloo

Igloos: Pro Vs Amateur

Building the world’s largest igloo - 1



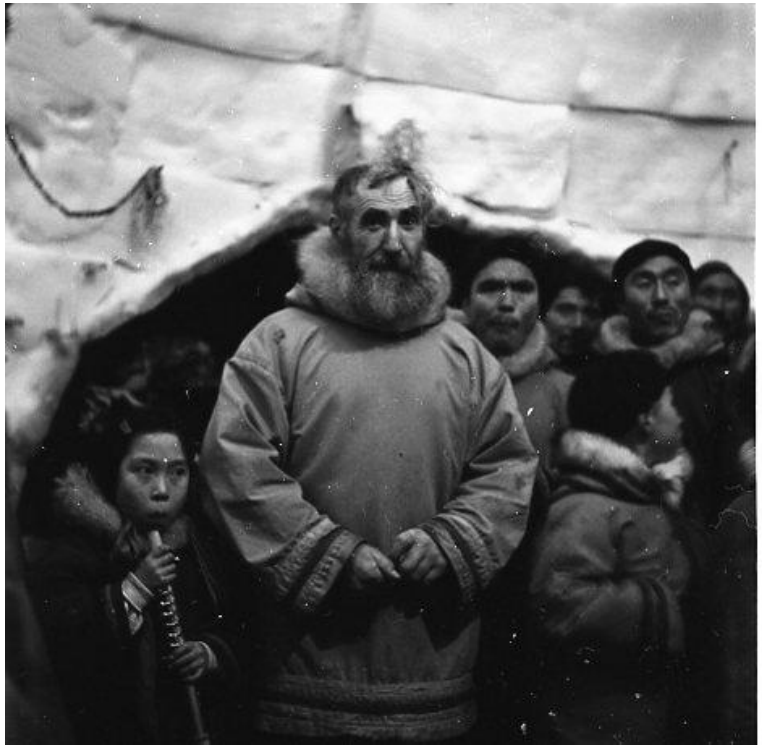
Building the world’s largest igloo - 2



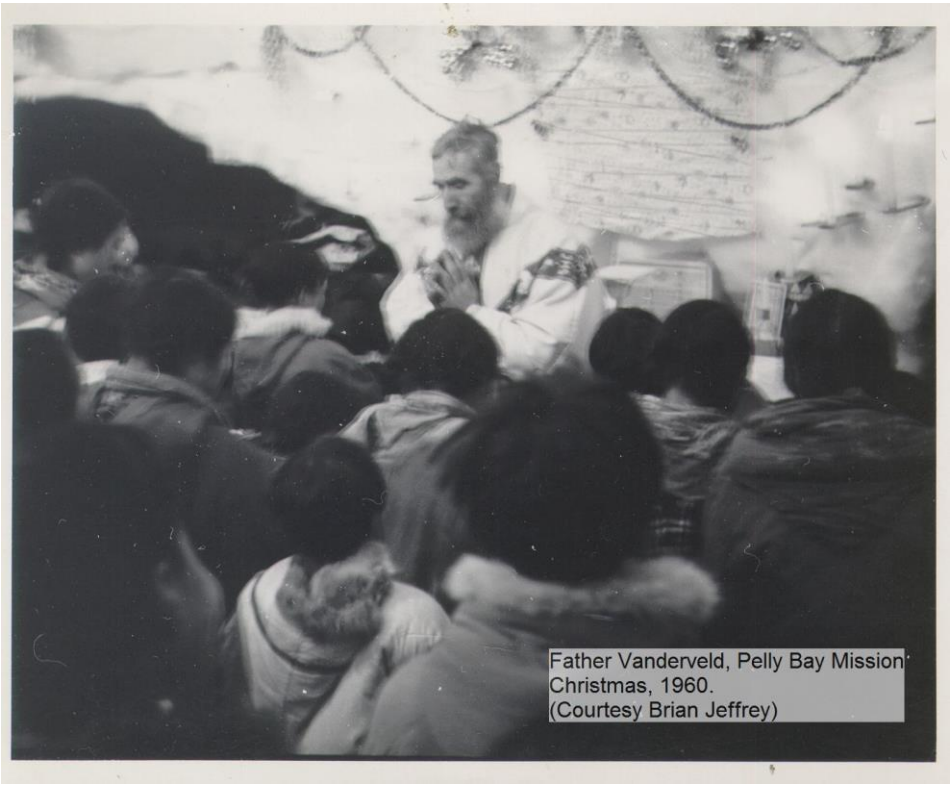
Building the world’s largest igloo - 3

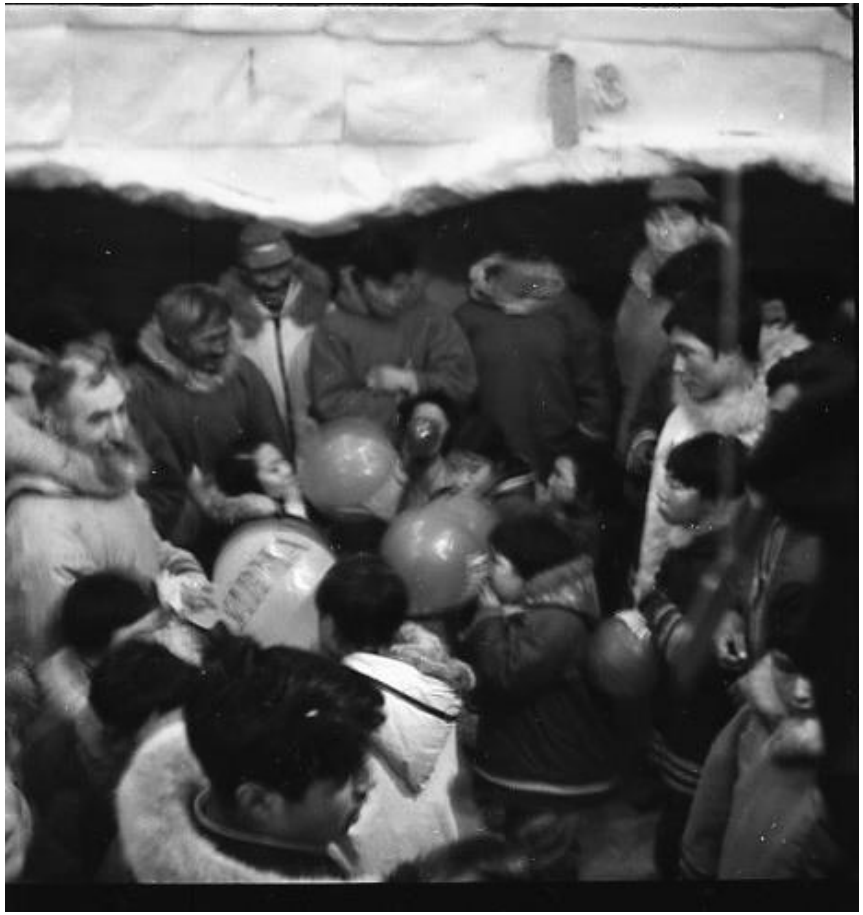
35-40 feet in diameter,
holding about 120 people

Christmas at Pelly Bay Mission

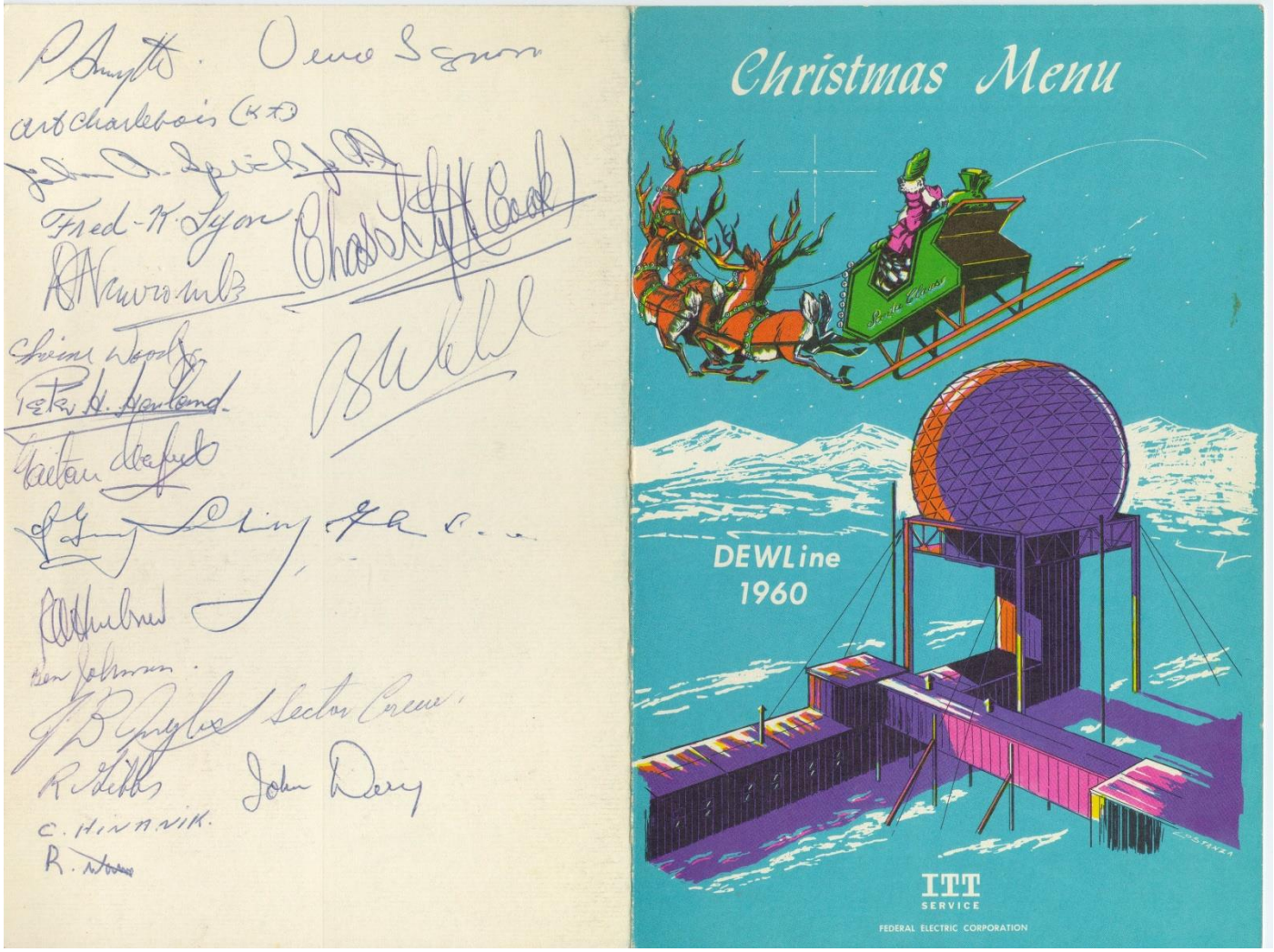


Truly a Christmas to Remember





Christmas at CAM-4…



Merry Christmas and a Happy New Year!

from all the members of

Project Headquarters and Dew Offices

R.H. CRUZEN

*** APPETIZERS ***

Celery Radishes Olives
Assorted Fruit Juices

*** SOUP ***

Consomme, Royale

*** ENTREES ***

Roast Young Tom Turkey with Stuffing
Giblet Gravy
Cranberry Jelly
Baked Ham with Raisin Sauce
Braised Duck, Bigarade

*** VEGETABLES ***

Buttered Green Peas Buttered Wax Beans
Yellow Turnips Whipped Potatoes
Candied Sweet Potatoes

*** SALAD ***

Chef's Special Tossed Green
Choice of French, Russian or Oil
and Vinegar Dressing

*** DESSERTS ***

Apple, Mince and Pumpkin Pies
Ice Cream
Fruit Cake

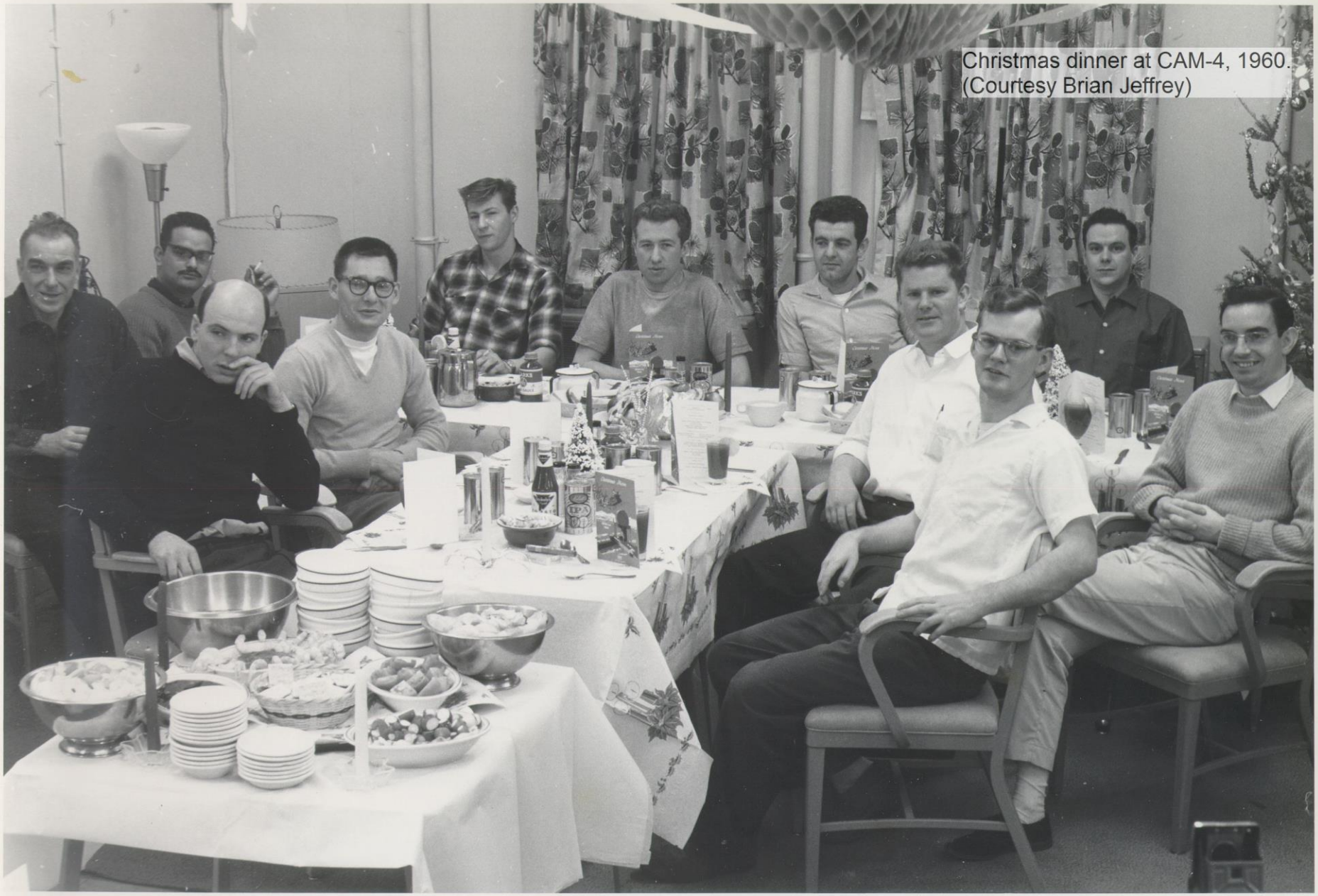
*** BEVERAGES ***

Coffee, Tea

Hot Rolls and Butter

Candy - Mixed Nuts - Fruits

Cigars Cigarettes



Christmas dinner at CAM-4, 1960.
(Courtesy Brian Jeffrey)

Story Time
Saturday Night Hi-Jinks

AKA: Shaving your teeth.

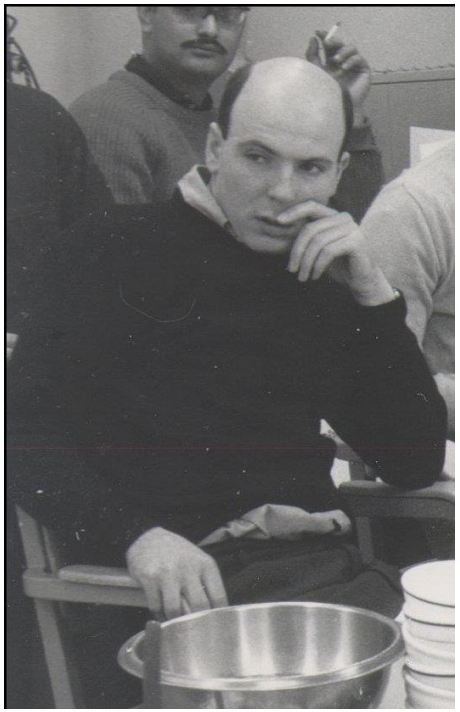
Starring:

- Brian Webb
- Brian Jeffrey

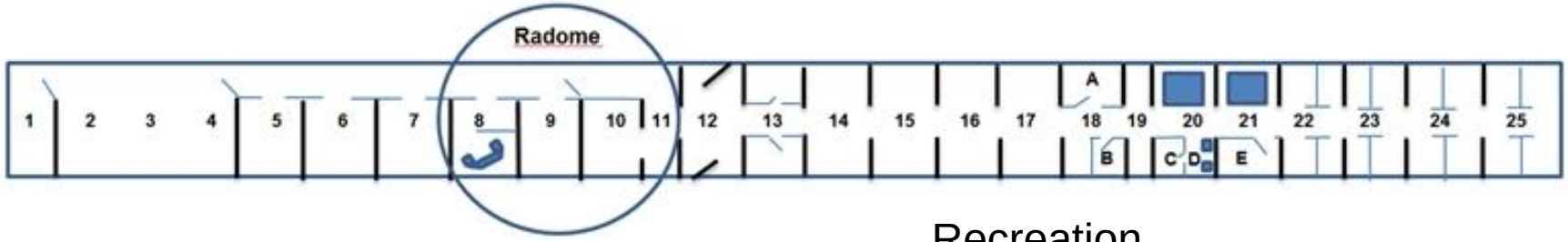
The Scene:

- Saturday night and Sunday morning/evening

Brian Webb (sober)



Brian Jeffrey (also sober)



Console

Recreation Module (17)

Bedrooms

Story Time

Missed Bogie (Target)…

- Starring:
  - Tom Billowich
  - Brian Jeffrey
- The Scene:
  - 4:15 - 4:30 AM
  - The PA system came alive & all hell broke loose

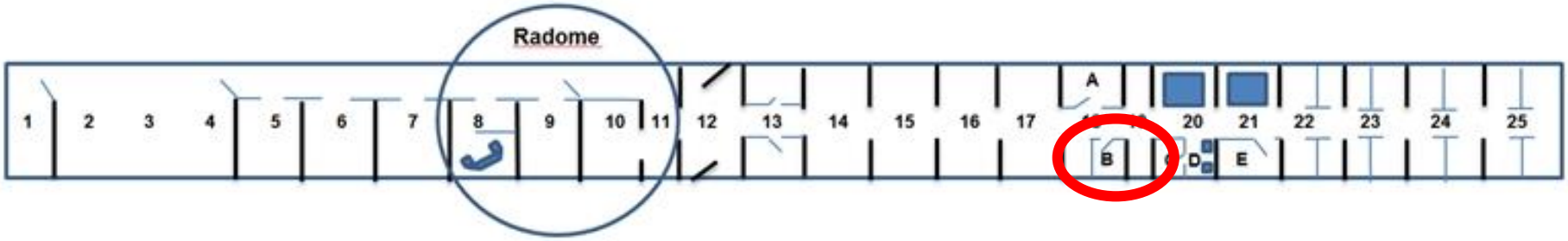
Les Burney on duty at radar console.
(Courtesy Brian Jeffrey)

Story Time
CQ **S**anta **K**lause…

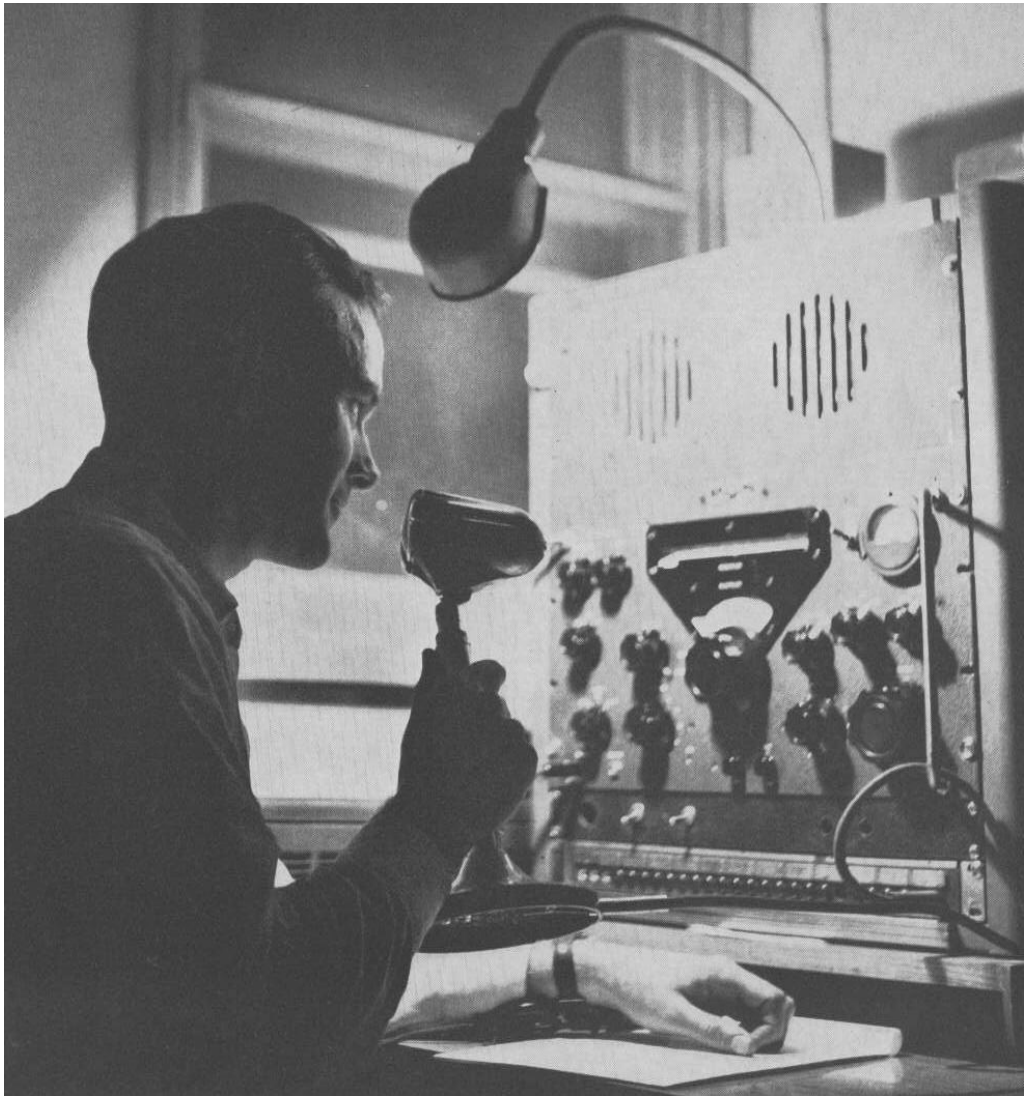
- Starring:
  - Brian Jeffrey - VE8SK
  - A load of happy children
- The Scene:
  - December 1960
  - CAM-4’s Emergency Radio Room

Emergency Radio Room

- Located away from the Electronic Modules
  - Collins 431-B1, one kilowatt transmitter
  - Collins 51J4 receiver
  - 3-Element beam



Ham Radio Equipment



VE8SK became
VE8 **S**anta **K**laus

Phone Patches

Escape from the North…

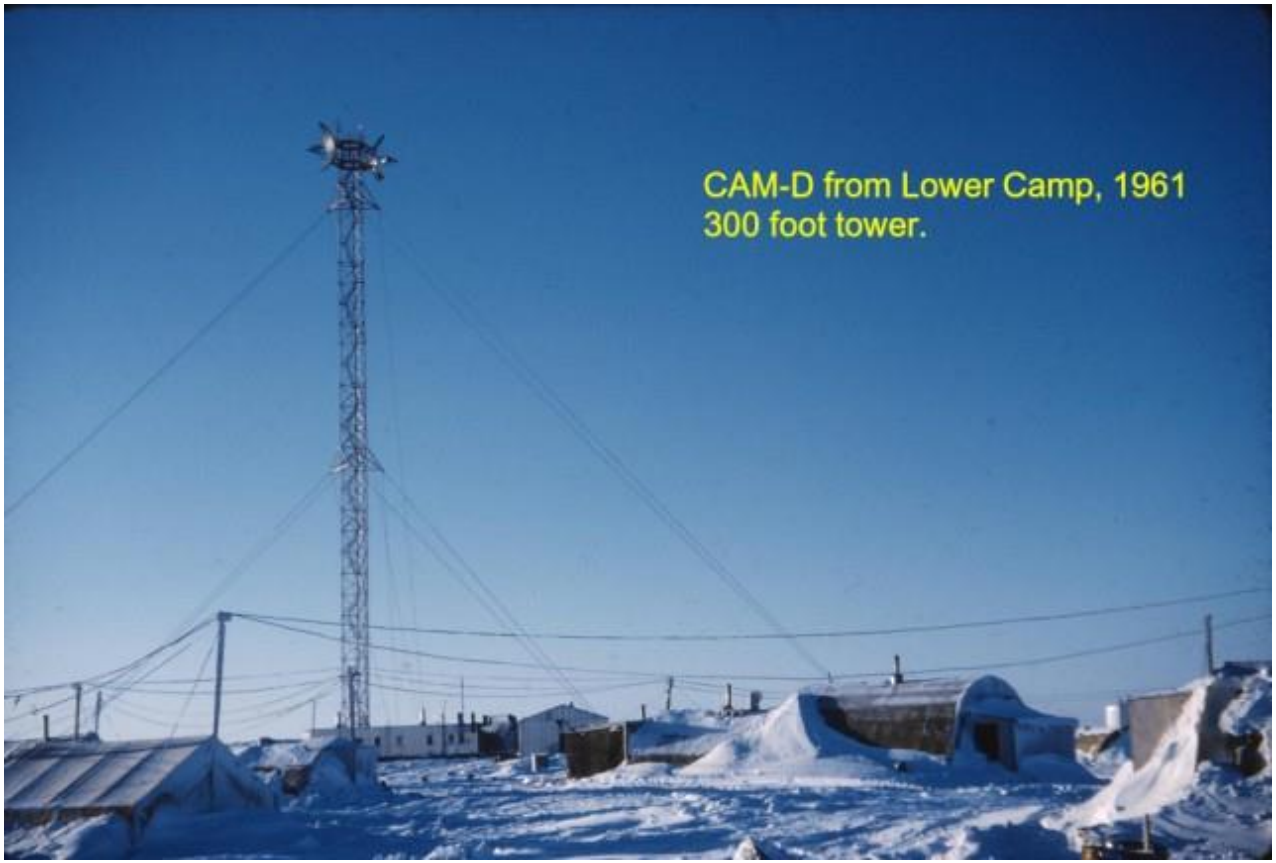
- Waited 12 months
- Had gained 30 pounds
- Bought some “going home” clothes
  - 3-piece suit for $29.95 from Sears (mail order)
- Somewhat “bushy”
- Don’t use the ***“F”*** word with your Mother!
- Returning North via Winnipeg

10 Hour flight… 9 Hours of Hell

1st Class Travel

New Assignment

- Bribed into going to an Intermediate Site (I-Site)
- Off I went to Simpson Lake, CAM-D

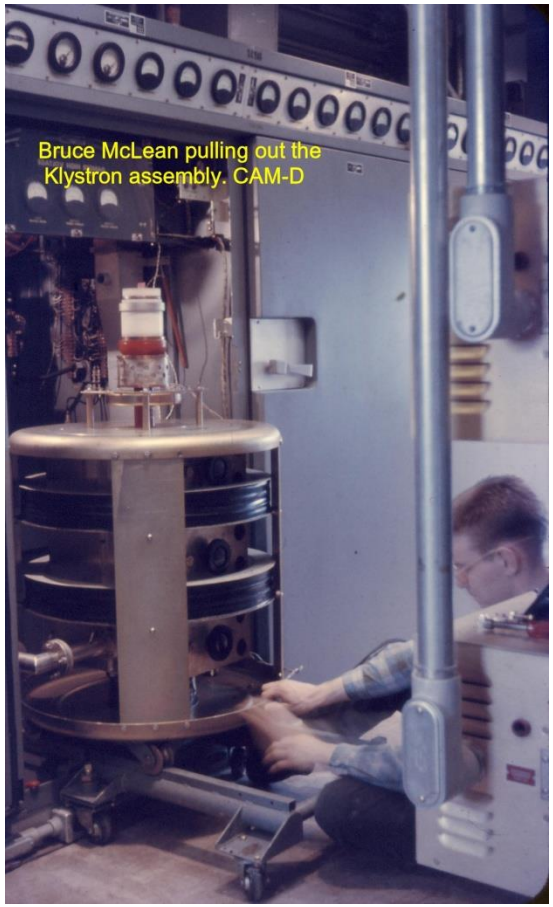


Working Around the Clock…

- Spring time is airlift time (POL supplies)
- Flights operated 24 hours a day for weeks

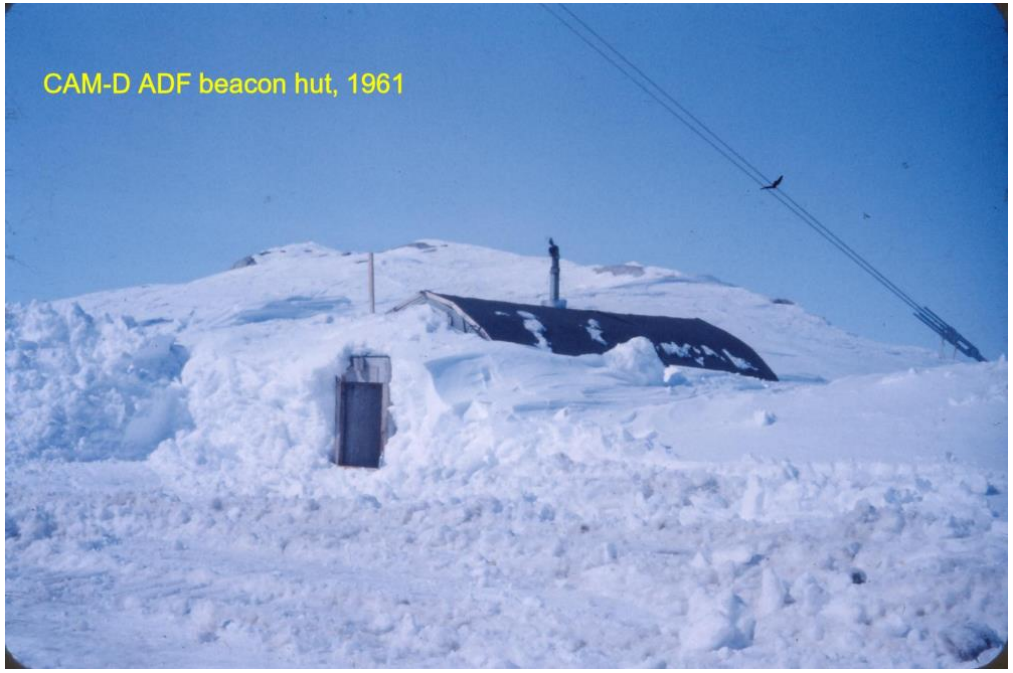
Happy Landings (Not!)…

Replacing a Klystron

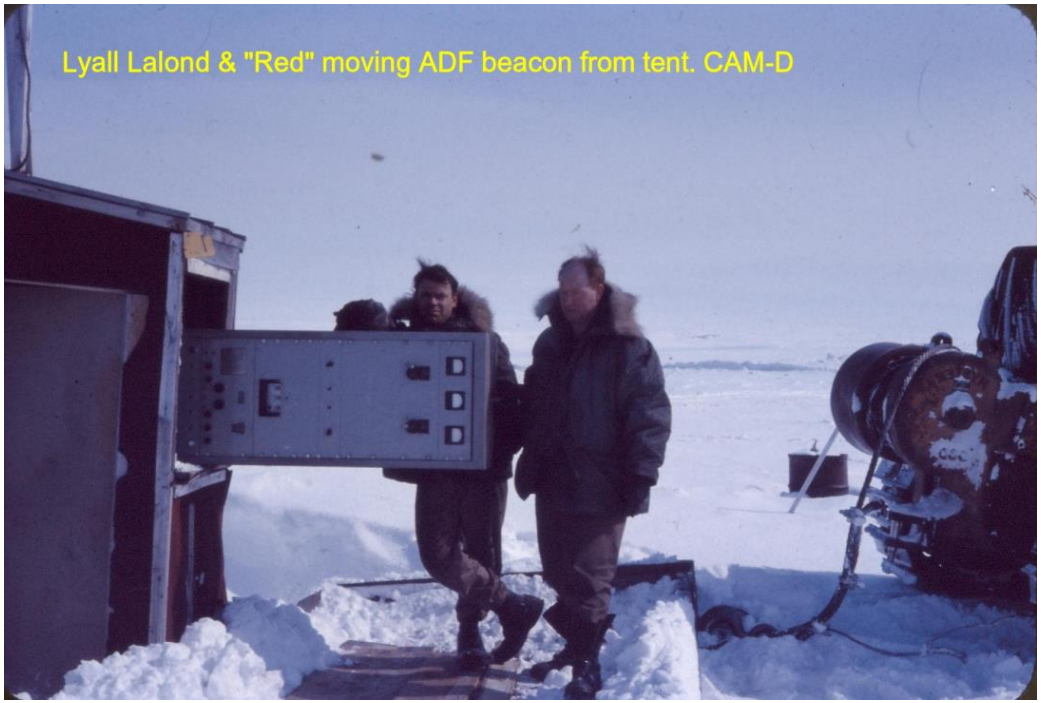


Story Time

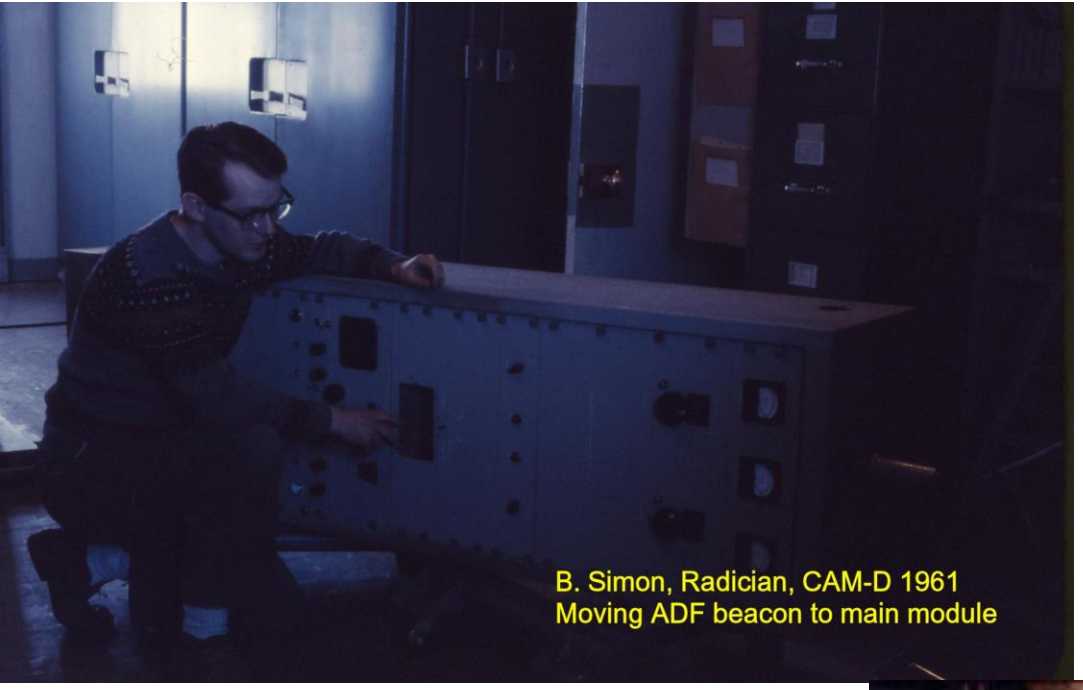
Moving the Radio Beacon



Lights on since 1957

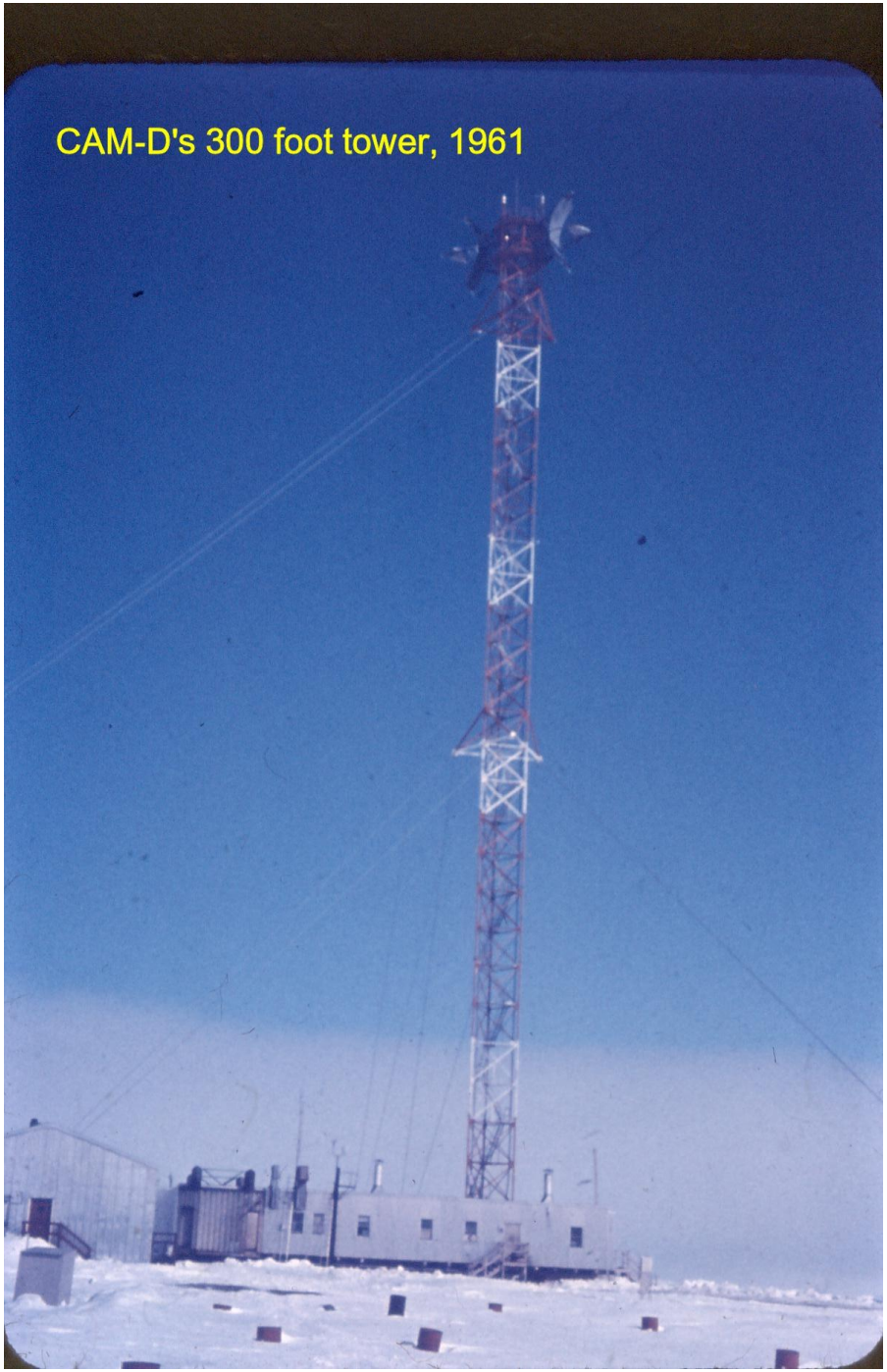

Lyall Lalond & "Red" moving ADF beacon from tent. CAM-D

B. Simon. Moving the ADF beacon at CAM-D from a tent to the main module.


B. Simon, Radician, CAM-D 1961
Moving ADF beacon to main module

One of Life’s Lessons

Fill your pockets!!!



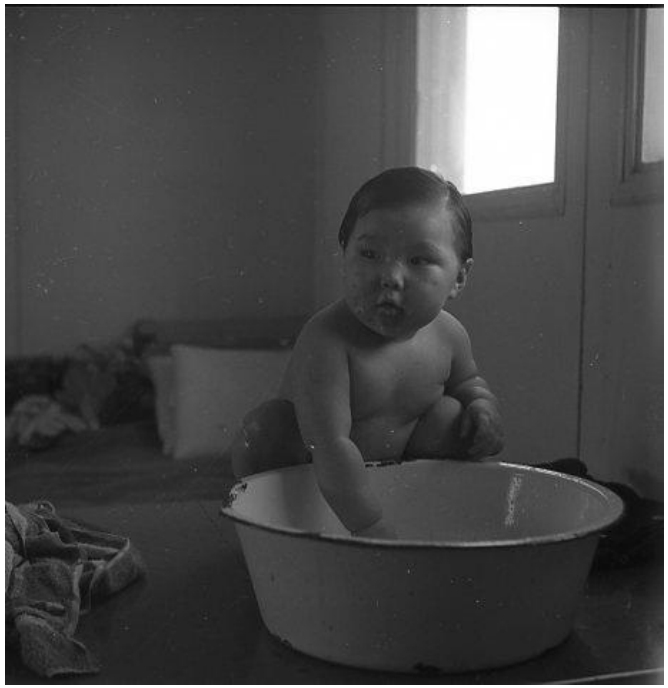
Story Time
Doctor Brian…

- Starring:
  - A very pregnant Eskimo woman
  - Brian Jeffrey
  - A Saint John’s Ambulance first aid book
  - A remotely located medical doctor at FOX-Main
- The Scene:
  - Middle of nowhere with a moaning pregnant lady
  - Tense radio traffic
  - Lots of shouting (by me)

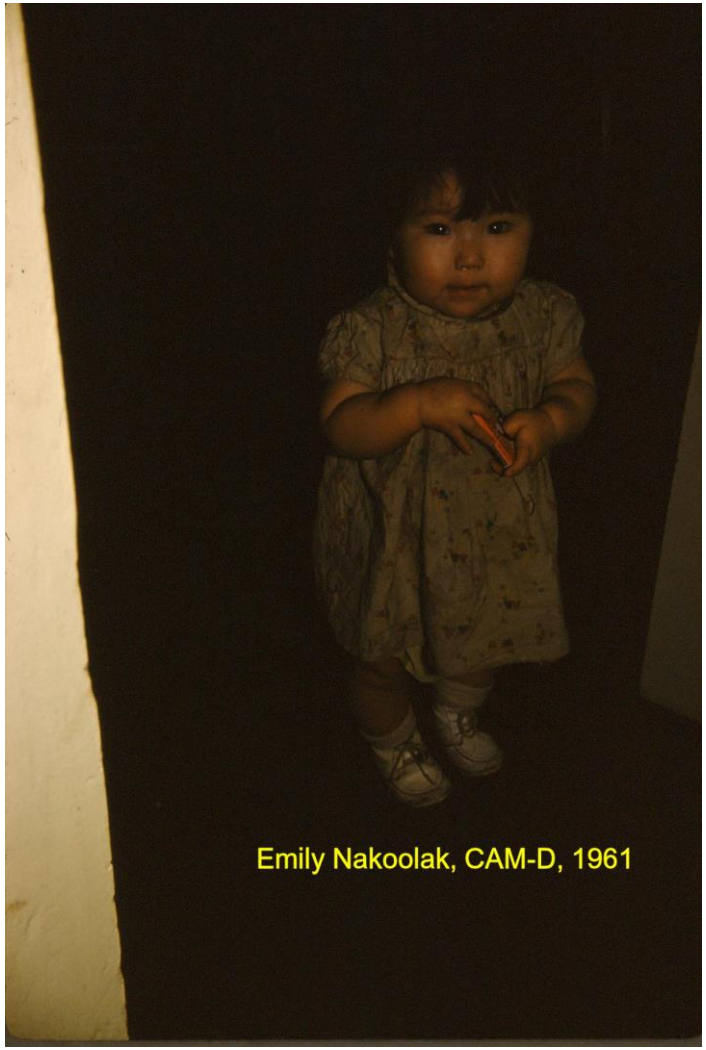
Mrs. Aoksar & son. CAM-D 1961

Meet Emily Nakoolak

Story Time
Doctor Brian, part two…



A Sad Ending



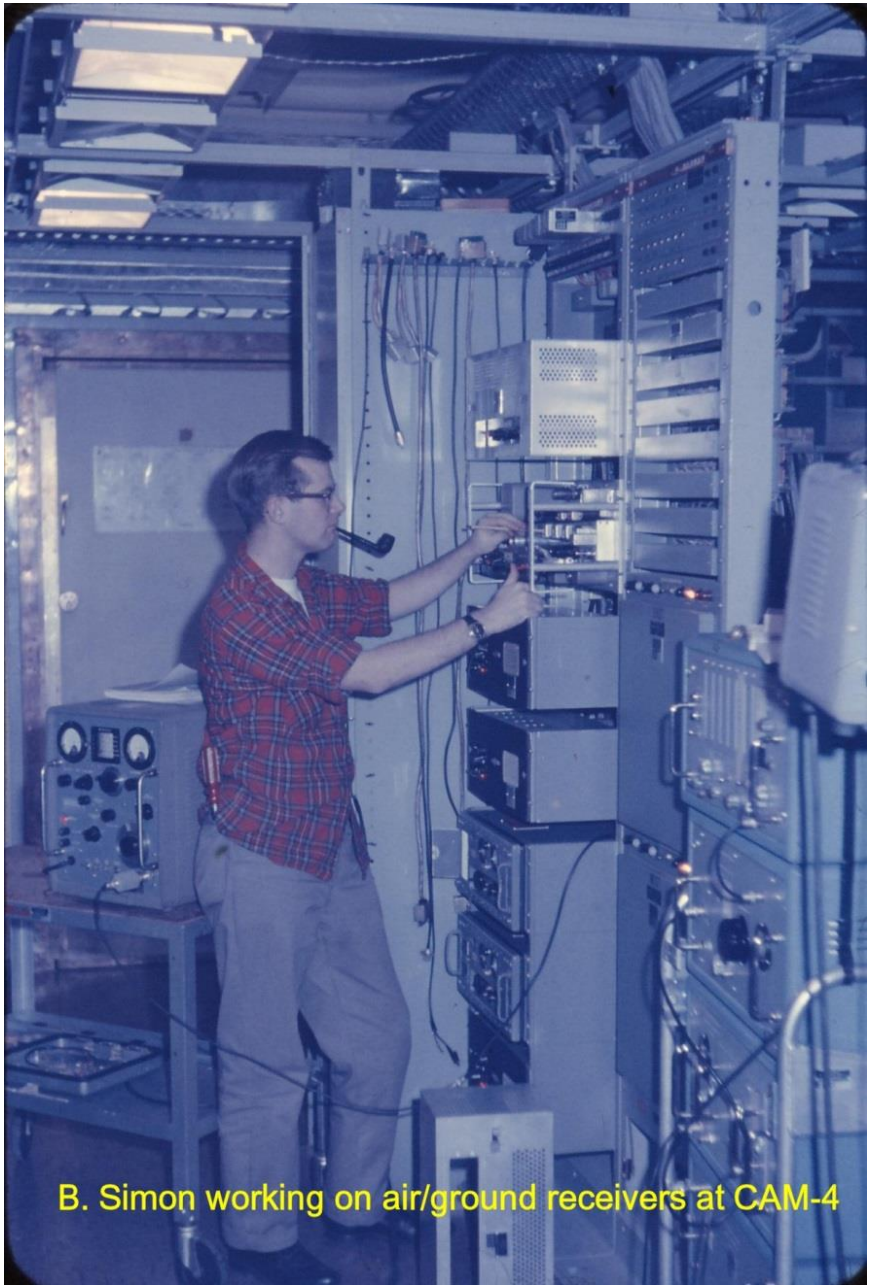
Emily died in the late 60’s

Time to Move Along Again…

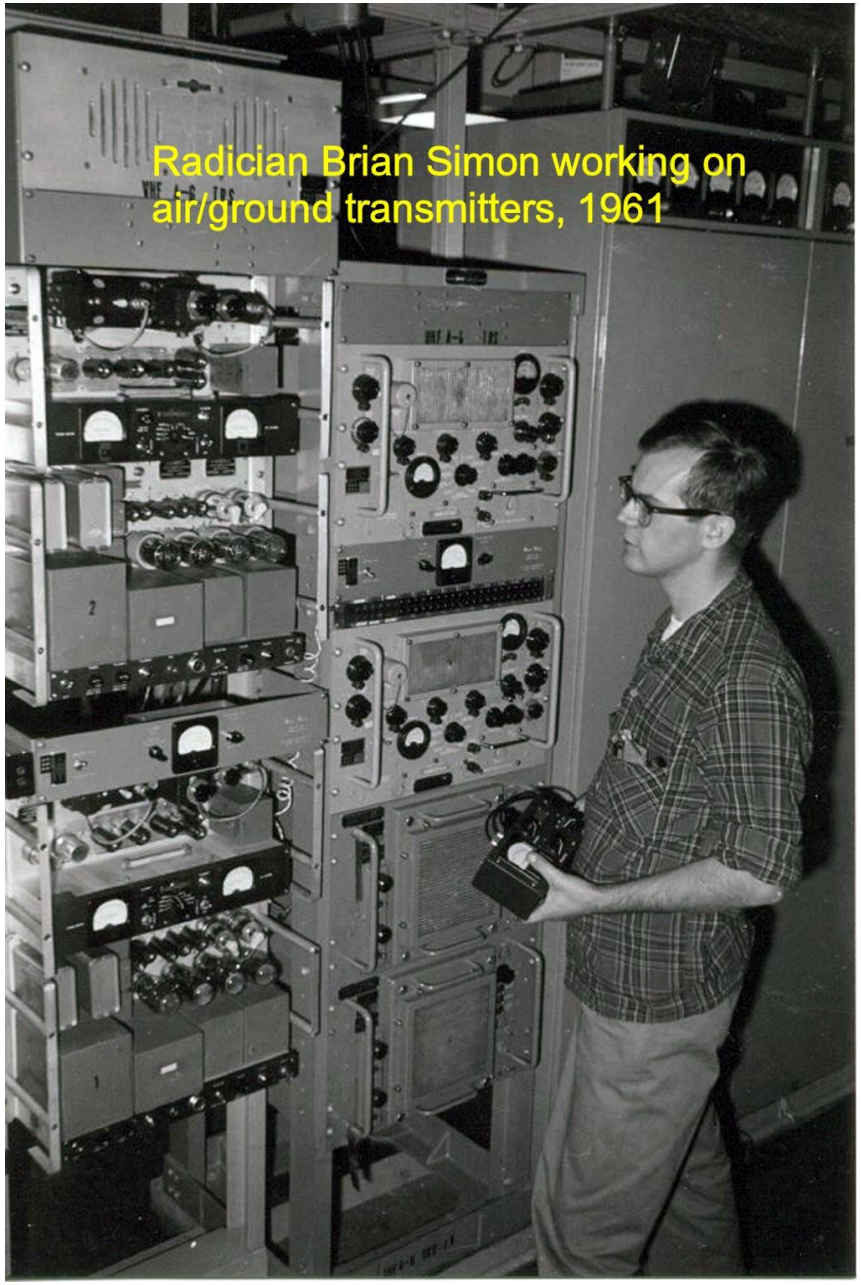
- Another trip South
- Offended my Mother… again
- Great 6-week R & R (Rest & Recreation)
- Returned to the Line and got my wish
- Became a member of the Sector Crew
- Air/Ground equipment
  - Collins 242F3, AN/GRT-3, AN/FRT-3 LF beacon,
  - I-Site communications system – GE VO-38 VHF

Story Time
God’s Will…

- Starring:
  - An inspector from FEC head office (Paramus NJ)
  - Brian Jeffrey
- The Scene:
  - Receiver room at Rowley Island (FOX-1)



B. Simon working on air/ground receivers at CAM-4

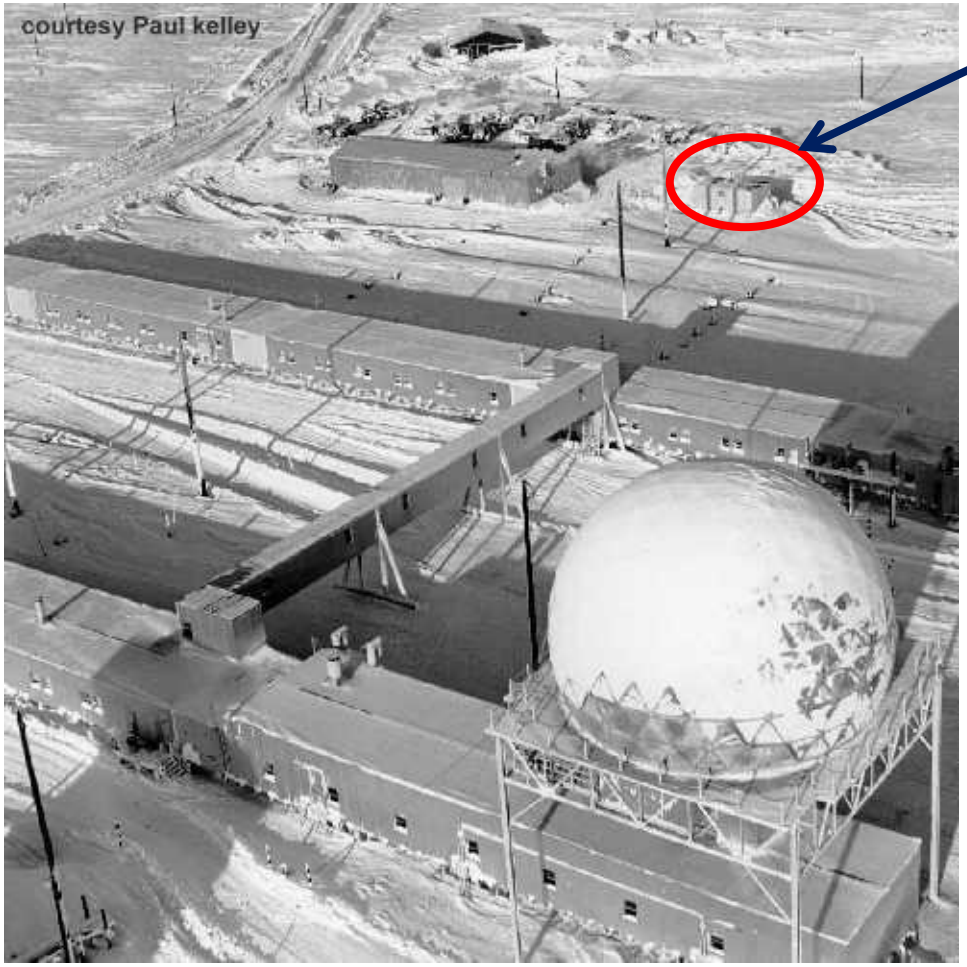


Radician Brian Simon working on air/ground transmitters, 1961

Story Time

The BOPSR Club…

- Starring:
  - Brian Jeffrey
  - Newbies Radicians (names long forgotten)
- The Scene:
  - BJ in transit with too much time on my hands
  - Too much booze (supplied by the Newbies)
  - Small bladder + cold urinal (-40 F & C)



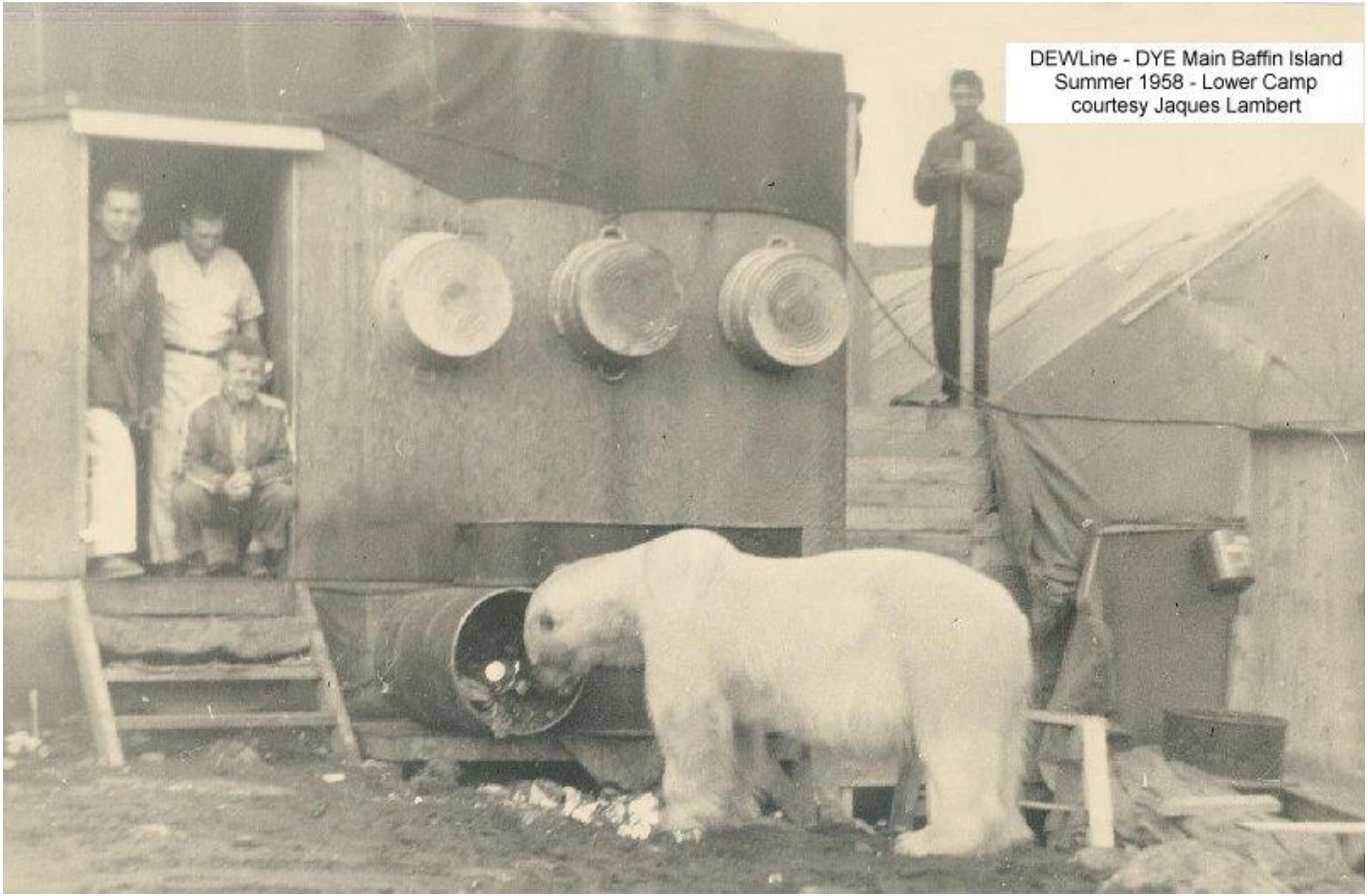
BOPSR Club

“Home” for the Sector Crew
& transient sleeping quarters.

Story Time

The Great Polar Bear Hunt…

- Starring:
  - A polar bear
  - An Eskimo hunter
  - Various pretend hunters
- The Scene:
  - Late summer at Rowley Island (FOX-1)
  - A polar bear is sighted close to the module train


DEWLine - DYE Main Baffin Island
Summer 1958 - Lower Camp
courtesy Jaques Lambert

Polar bear near FOX-1, 1961

Eskimo going in for the final kill using a single shot .22 rifle. FOX-1 1961

Great white hunter!

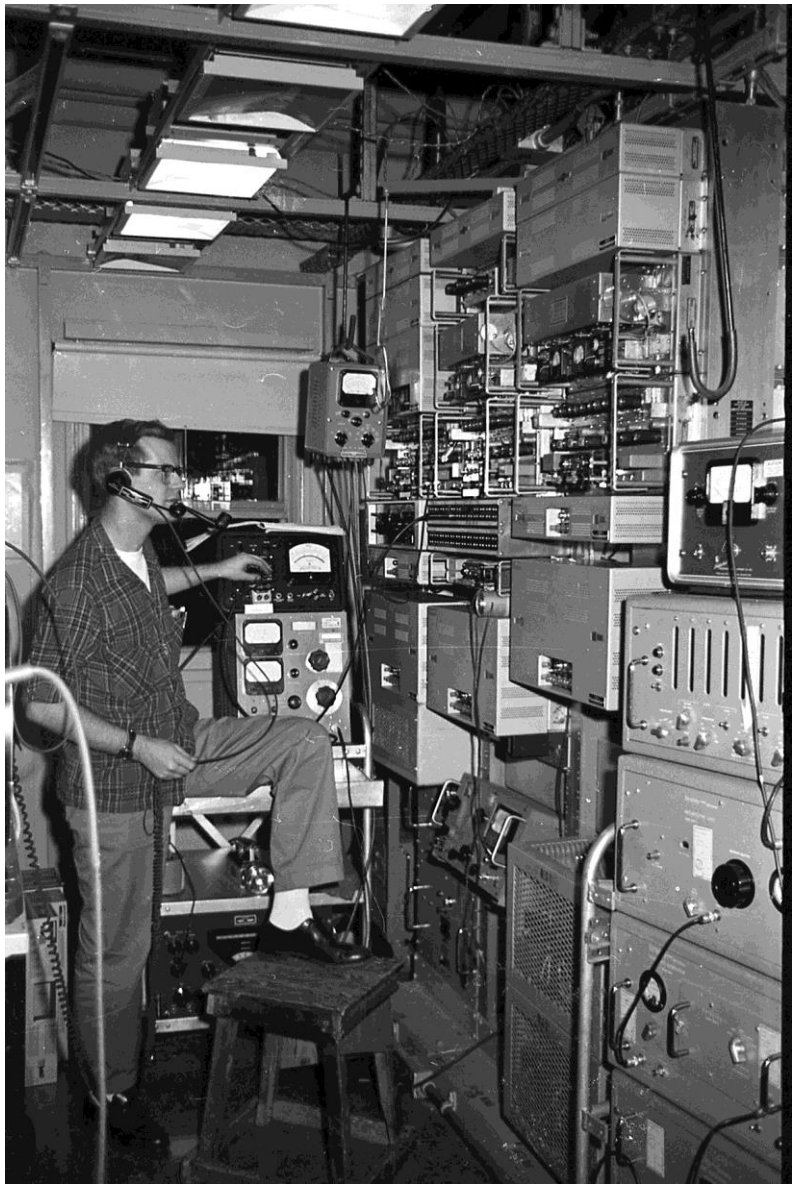
Foxes, Foxes Everywhere…

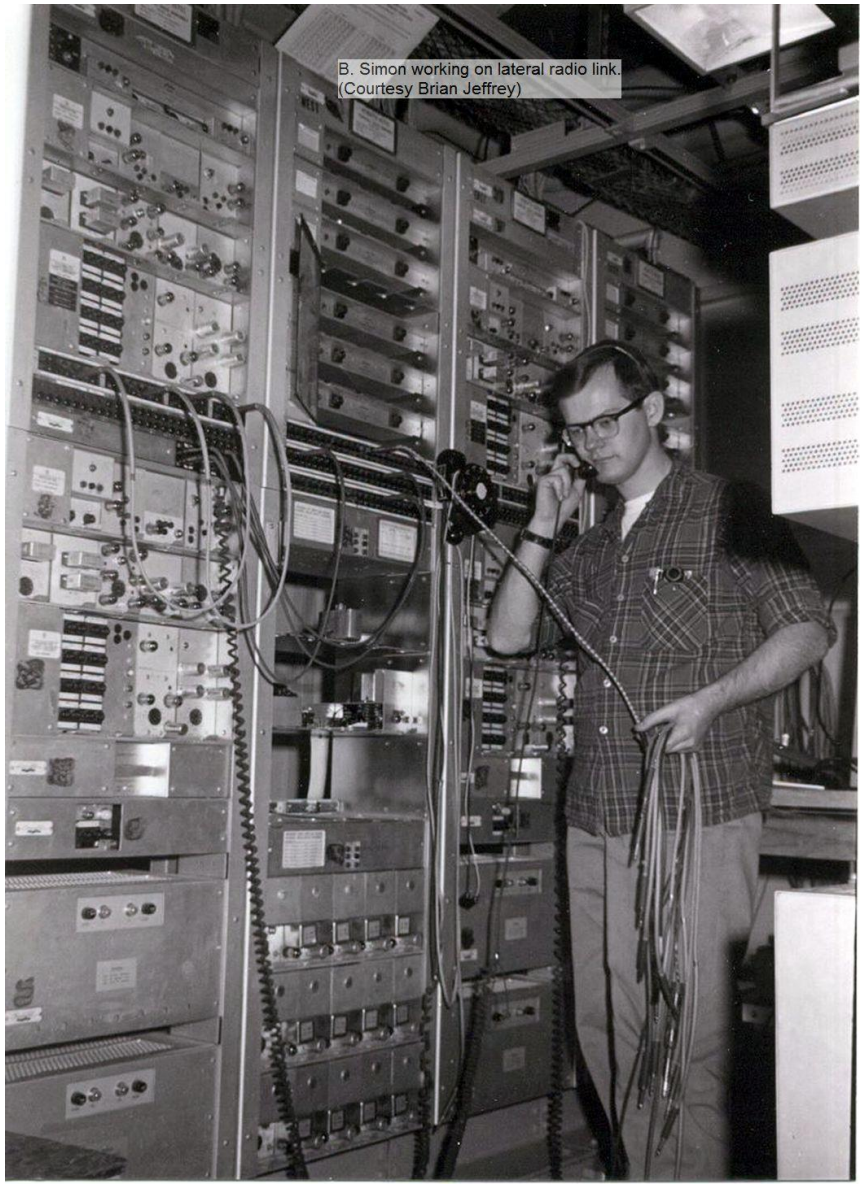
One Last Contract…

- Returned from my last R&R leave
- Wanted off the Sector Crew
- Became the “Lateral Radician” at Fox Main
- AN/FRC-45 tropo scatter system
  - 24 channel Lenkurt multiplex equipment
  - Required monthly alignment
  - Orchestrated from the Main Station

Lateral Communications

Lateral Antennas



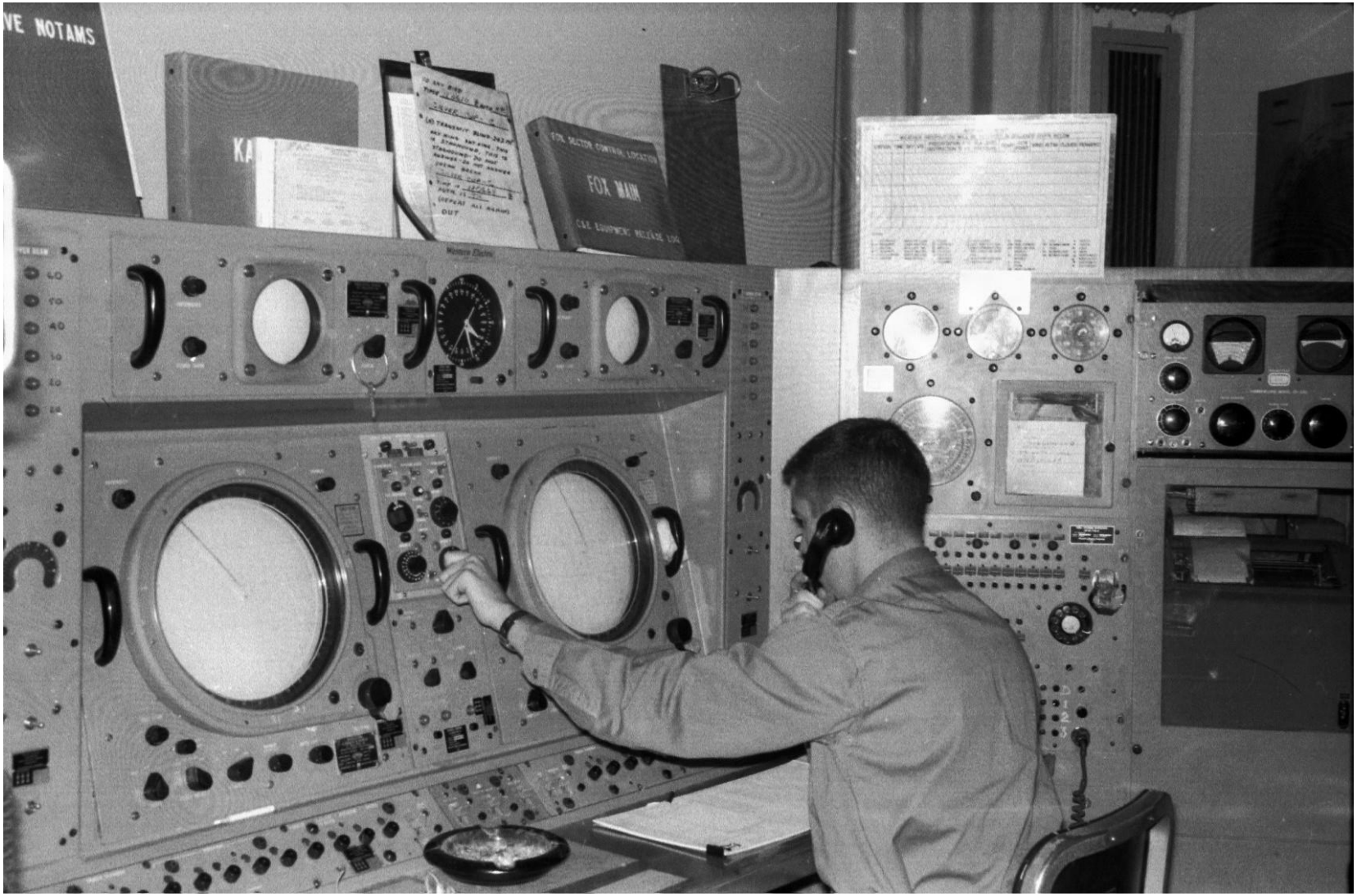


B. Simon working on lateral radio link.
(Courtesy Brian Jeffrey)

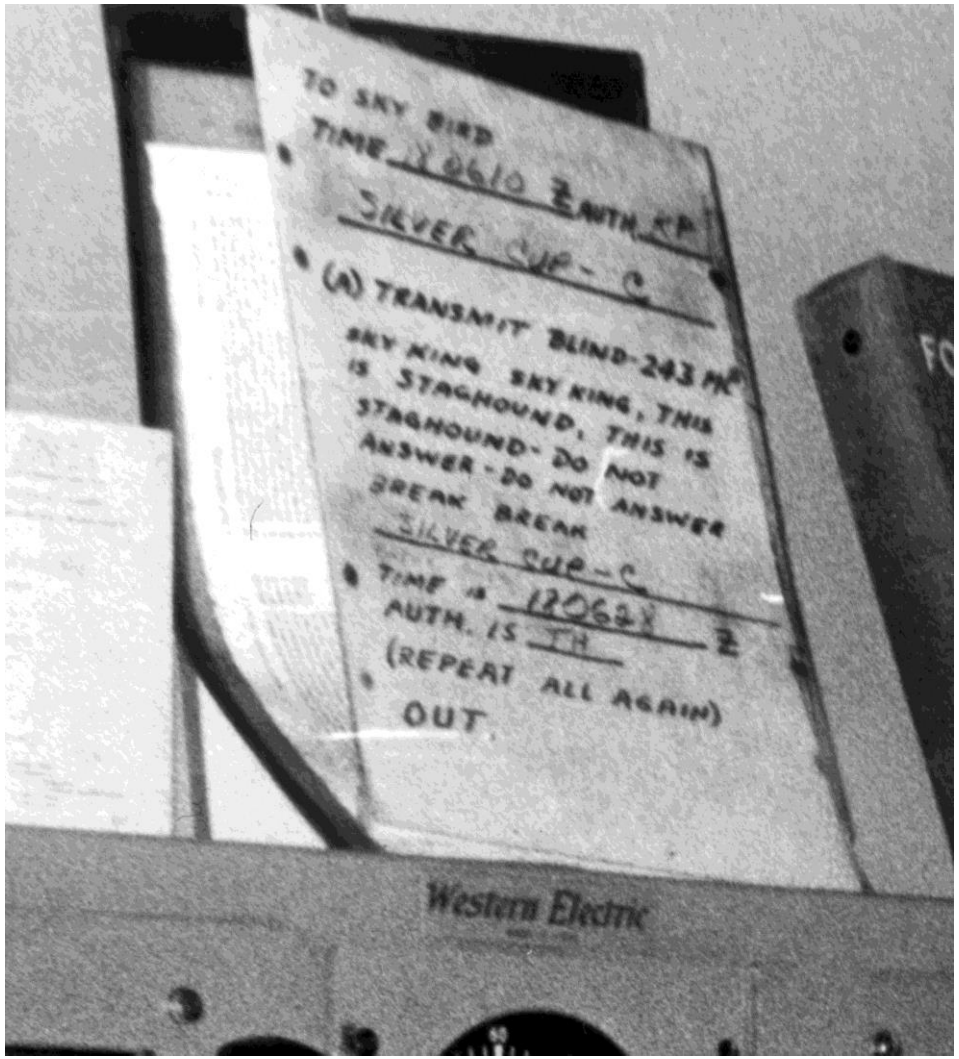
“Failsafe” Device…

- Movie **Failsafe** starring Henry Fonda
  - Device in a SAC bomber goes bad
- No such device!
  - There was **Us!**
  - Transmitting the “Go” – “No go” message
- Emergency Action Message (EAM)
  - *“Sky King, Sky King…”*

The “Go” – “No go” Message

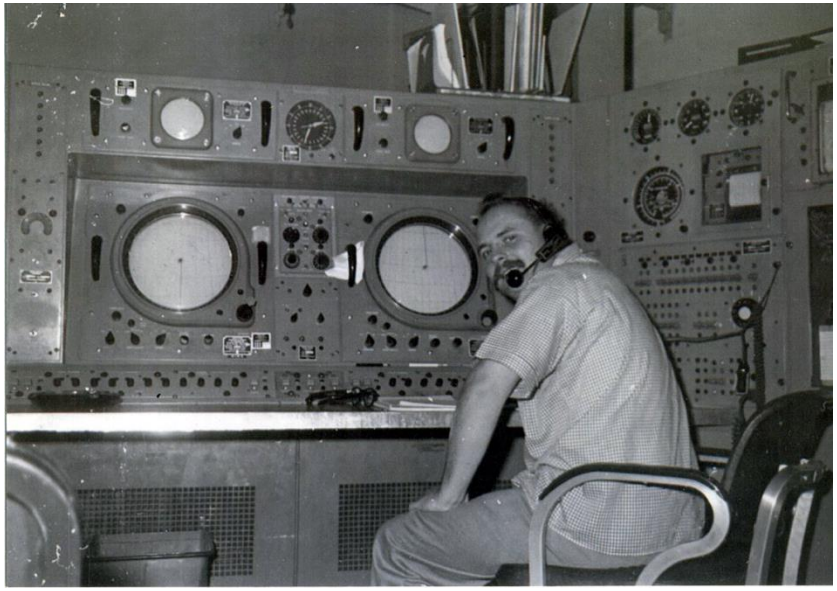


“Sky King, Sky King…”



Talking to SAC B-52's…

- Tactical call signs (Jaguar 15)
- *"Hall Beach Radio"* to commercial flights
- Became *"Staghound Radio"* to SAC



Cuban Missile Crisis

- Oct 22/62: Defcon 5 upgraded to Defcon 3
  - B-52 bombers increased from 12 to 66
- Oct 24/62: Defcon 3 becomes Defcon 2
  - An additional 130 ICBM's are readied
  - SAC-alerted nuclear weapons now at 2952
- Oct 26/62: Still at Defcon 2
  - Missiles are programmed with Soviet targets
  - Minuteman missiles are readied for firing
  - Some B-52 fly past their turn-around points
  - Gen Lemay is pushing Pres Kennedy to bomb Cuba

Cuban Missile Crisis

We were not sure there would be a South left to go back to!

Last Trip …

- Left the Line for the last time in March 1963
- Had spent 36 months in the Arctic
- Got married
- Returned to school (U of O) (1964)
- Joined Instronics Ltd & met Doug Leach & Ralph Cameron
- I lied… it wasn’t my last trip!

Return to Hall Beach

- I returned, July 2nd-4th, 2012.
- 52 years after I first arrived at Hall Beach
- Incredible journey down memory lane

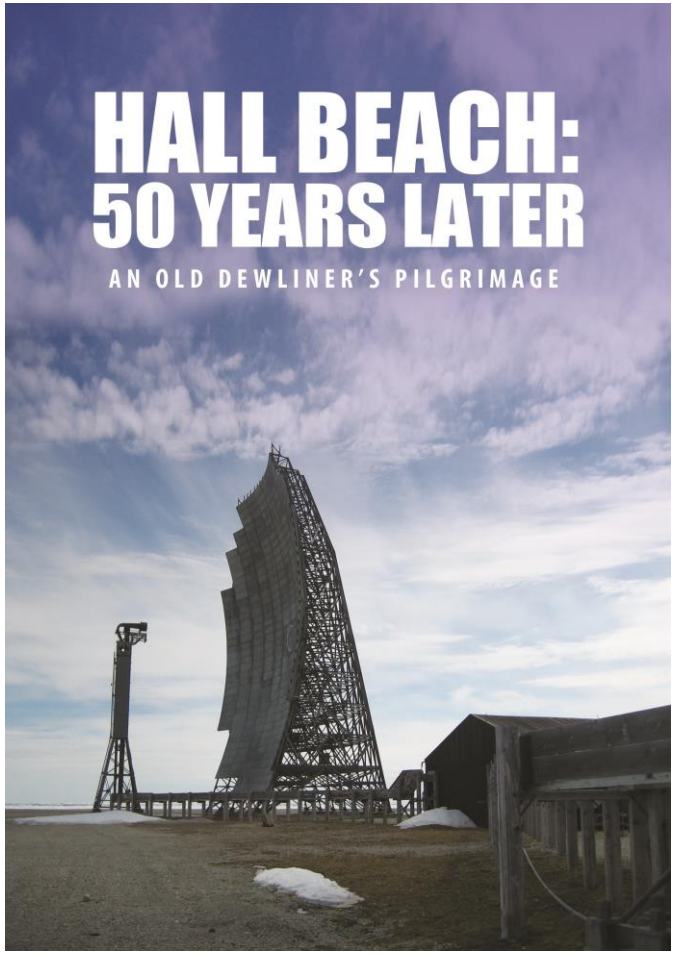
Return to Hall Beach

A Changed World

- All but abandoned facilities
- No isolation
- Multi-channel TV in every room
- Telephone access versus radio phone patches
- 2 flights a day Vs 1 flight a week (maybe)
- 6-week Vs 6 to 9-month rotation
- 3 Technicians Vs 42 Radicians/sector

Historic Landmarks

See the movie!



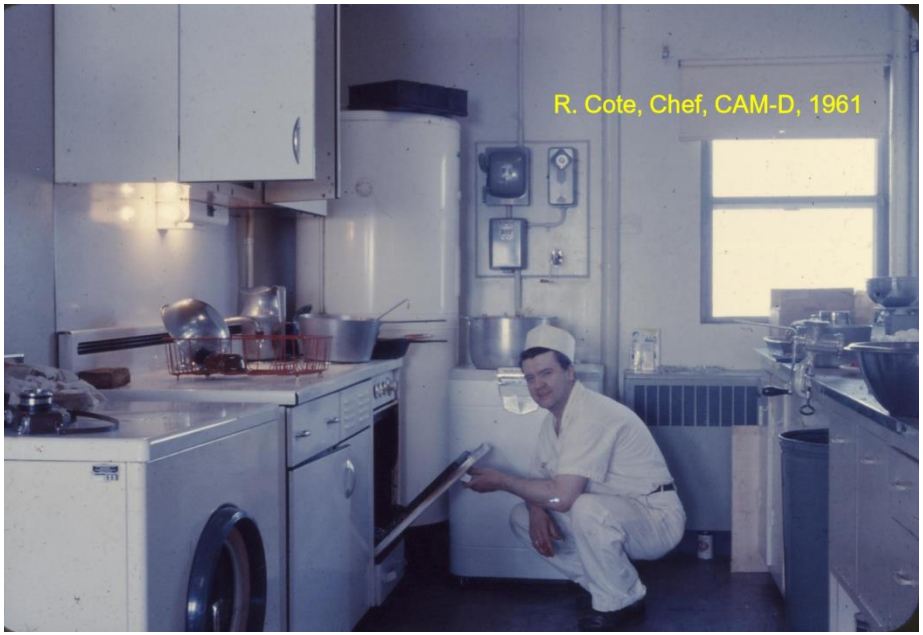
For more stories, visit www.DEWLine.ca

For those of you still awake…

Thanks for allowing me to share these memories

What questions might you have?

CAM-D Motley Crew…



Idle Hands (& Minds) at Work…

- Starring:
  - Don Kerr, Radician
  - Brian Jeffrey (star of stage & screen!)
  - Helicopter CF-HNG
- The Scene:
  - Two bored Radicians
  - Early summer morning
  - Bad combination

HNG lifting off from FOX-C
CF-HNG
OKANAGAN Group

B. Jeffrey (on top of console) and Doug Kerr at radar console. (Courtesy Brian Jeffrey)

Don Kerr (left) & Brian Simon, FOX-3, 1962.

The Ghost at the Airfield…

- Starring:
  - Brian Jeffrey
  - Console Radician
  - **“It”**
- The Scene:
  - Summer time, 3-4 AM
  - Off-hook condition in the 740 PBX telephone switch

Brian Simon filling up at local gas station, CAM-D (Courtesy Brian Jeffrey)

Brian Simon driving 4X4 at CAM-D. (Courtesy Brian Jeffrey)