

**Finding Aid**  
**The Bill Ray White Alice Collection**  
**B94.9.1-1386**

Bill Ray worked as a contract officer on the White Alice Project. "White Alice" was a communication system developed by the U.S. Air Force to provide an integrated system for Federal, military and civil agencies as well as the public. "White Alice" began service in 1956 providing high quality and accurate service to the users. "White Alice" was the popular name for "Forward Propagation by Tropospheric Scatter."

Bill Ray's wife, Frances, a long-time volunteer in the Museum Archives, donated this collection to the Archives after his death in 1994. Our volunteer, Opal Myers, organized the collection during the Fall of 1994.

The boxes are arranged in this manner: Box 1 includes photos of equipment; Boxes 2 - 5 are arranged alphabetically by site location; Box 6 includes Project 717 Construction Progress and activity reports; Box 7 holds miscellaneous geographic sites.

**BOX 1      Bell Telephone Labs**

**Folder 1-2, photos .1 - .196**

A series of photographs covering erection of the first prototype 60' parabolic TROPO antenna at Blaw-Knox Plant in Pittsburgh, Pennsylvania.

**Folder 3, photos .197 - .219 (Blaw-Knox)**

Foundations - Shoes  
Storage - Prefabbing  
Raising Members

**Folder 4, photos .220 - .243 (Blaw-Knox)**

Fabrication  
Structure details  
Feedhorn and Waveguide  
Sheathing

**Folder 5, photos .244 - .267 (Misc. Equipment)**

Antennas - typical  
Artists' conceptions  
Brooklyn Prototype  
De-icing Equipment  
Feedhorn Tower

**Folder 6, photos .268 - .296 (Engine Alternators)**

Buda  
Chicago  
Installed

**Folder 7, photos .297 - .336 (Electronic Equipment**  
Andrew Corporation  
Cabinet  
Control  
Power  
Receiver  
Transmitter  
General  
Special (REA Pa Amp.)

**Folder 8, photos .337 - .374**  
A series of photos of Auburn Warehouse showing loading,  
receiving and packing.

**BOX 2 Anchorage - Boswell Bay**

**Folder 8a, photos .375 - .396**  
Anchorage ACS Building additions, towers, storage

**Folder 9, photos .397 - 414**  
Aniak, aerial views of site location--see also  
Dorm and equipment building, antennas, Alternator  
and POL tanks

Box

**Folder 10, photos .415 - .476**  
Anvil Mt. site location (Nome)  
Barge with equipment sinking and salvage operation  
Nome CAA  
Supplies, loading, unloading storage

**Folder 11, photos .477 - .585**  
Bear Creek site location (Tanana)  
Dormitory, equipment and storage buildings  
Antennas  
Water line and pump house  
Septic tank  
POL tanks  
Tanana CAA

**Folder 12, photos .586 - .605**  
Bethel site location--see also Box 6  
Bethel CAA

**Folder 13, photos .606 - .658**  
Big Mountain site location (Illiamna)  
Building construction  
Illiamna CAA  
Illiamna Test Tower  
Antennas

**Folder 14, photos .659 - .695**  
Boswell Bay site location (Hinchinbrook Island)

Proposed POL location and well location  
Road construction  
M.K. Camp  
Barging equipment from Cordova  
Hinchinbrook CAA

**BOX 3            Clam Gulch - Indian Mt.**

**Folder 15,    photos .696 - .701**  
Clam Gulch  
Kenai RIS

**Folder 16,    photos .702 - .709**  
Diamond Ridge Site (Homer) -- see also Box 6  
Homer CAA  
Test Towers

**Folder 17,    photos .710 - .712**  
Anchorage RIN - Elmendorf  
Antenna Tower and Wave guide installation

**Folder 18,    photos .712 - .714**  
Fairbanks ACS TD-2 Site  
Fairbanks CAA

**Folder 19,    photos .715 - .722**  
Ft. Yukon Site location  
Antenna and feed horns

**Folder 20,    photos .723 - .901**  
Granite Mt. site (Candle - Haycock)  
M-K Camp  
Equipment building construction  
Airstrip for bush planes  
POL tanks  
Well drilling - spring house  
Test pits  
Antennas and feed horns  
Alaska Airline unloading materials at Moon Creek

**Folder 21,    photos .902 - .909**  
Indian Mt. Site  
Antenna to Bear Creek  
Transmission line

**BOX 4            Kalakaket - Newenham**

**Folder 22,    photos .910 - .937**  
Kalakaket site (Galena )--see also Box 6  
Constructing dormitory building  
Laboratory  
Antennas and waveguides  
H - 21 at Airstrip  
Galena CAA

**Folder 23, photos .938 - .947**  
King Salmon site (Naknek)-- see also Box 6  
Naknek CAA  
Tower mounted on trailer  
Equipment hut

**Folder 24, photos .948 - .973**  
Kotzebue Site -- see also Box 6  
Antenna Truss supports  
Waveguide supports

**Folder 25, photos .974 - .975**  
Lisburne Site see also Box 6  
Test towers

**Folder 26, photos .976 - .979**  
Middleton Island site  
Middleton Island CAA

**Folder 27, photos .980 - .988**  
Naptowne (Kenai R1N)  
Tower footings and waveguide support

**Folder 28, photos .989 - .1045**  
Neklasson Lake site (Wasilla)  
Feed horns  
Antennae and TD2 towers  
Waveguide support  
13 representatives from electric companies  
Equipment and laboratory

identifie

**Folder 29, photos .1046 - .1083**  
Newenham site -- see also Box 6  
Equipment and dormitory buildings  
Antennas  
Well drilling operation  
Gravel source  
Unloading equipment from barges  
Shop and re-building room

**BOX 5 North River (Unalakleet) - Wales**

**Folder 30, photos .1084 - .1100**  
North River site (Unalakleet) see also Box 6  
Unalakleet CAA

**Folder 31, photos .1101 - .1117**  
Northeast Cape site  
Equipment hut, damaged and re-built  
Antennas  
POL storage tanks  
Detail of material in Barrow area

**Folder 32, photos .1118 - .1143**

Pedro Dome site  
Equipment building and dormitory construction  
Erecting TD-2 Antenna horn  
Foundation and template--antenna #4  
Excavation and forms--antenna #4  
Trench in bed rock  
TD-2 piers  
204 ft. Test tower construction  
Site shown from Steese Highway

**Folder 33, (does not exist)**

**Folder 34, photos .1144 - .1172**

Pillar Mt. (Kodiak)--see also Box 6  
Waveguide  
Feedhorn  
Equipment building construction  
Antenna  
Cat pulling sled load of equipment up mountain  
C-46 unloading complete set of transmitter equipment

**Folder 35, photos .1173 - .1174**

Rabbit Creek site (Potter #2)  
First completed TD-2 Tower, Section 19 (Anchorage

**Folder 36, photos .1175 - .1251**

Romanzof site  
Equipment and Dorm building construction - typical bank se  
French drain from dorm  
Backfilling sewer lines  
Equipment building with transformer room  
Antennas and concrete piers  
Waveguide supports  
Water storage room  
POL Storage Tanks and dike wall  
Heated sewer line  
Equipment repair shop  
M-K Storage warehouse  
Buildings and equipment completely covered by snow

**Folder 37, photos .1252 - .1267**

Sparrevohn site  
Test tower and road  
A/G Transmitter

**Folder 38, photos .1267 - .1269**

Sitkinak Site Area - Section 19

**Folder 39, photos .1270 - .1286**

Tatalina site (McGrath) see also Box 6  
H-21 wreck and damaged dish  
McGrath CAA

Roundabout Mts. - Takotna Mt.  
Ice on A.F. Tramway  
Collapsed Test Tower

**Folder 40, photos .1287 - .1297**

Tin City site (Wales)  
Equipment building  
Antenna Construction  
Wales CAA

**BOX 6 Project 717 - White Alice - Construction Progress,  
October & November 1956**

**Folder 41, photos .1298 - .1308**

Aniak site --see also Box 2  
60' Dishes  
Equipment building  
Water pump house  
Fuel storage tanks  
Dormitory  
Aerial view

**Folder 42, photos .1309**

Tatalina site - aerial view - see also Box 5

**Folder 43, photos .1310 - .1327**

Galena site -- see also Box 4  
Supports for Dish  
Heated Dish  
60' Dishes under construction  
Equipment building  
Heating ground to pour concrete  
Dormitory  
Aerial view  
Concrete Footings  
Motor generator unit in power room  
Caterpillar with ripper breaking frozen ground

**Folder 44, photos .1328 - .1332**

Unalakleet site -- see also Box 5  
Clearing site area  
Construction camp  
Bridge to site

**Folder 45 photos .1333 - .1338**

Kotzebue site -- see also Box 4  
60' dishes  
Illustration of piling for buildings and antenna support  
Support for 30' dish with fuel tank and heaters  
Waveguide run  
Equipment building

**Folder 46, photos .1339 - .1346**

Lisburne site -- see also Box 4

Constructing dish supports  
Pouring concrete floor  
Heaters used to keep concrete warm  
Ditch digging in frozen ground for pipe line  
Equipment breaking frozen ground  
Heat ducts and conduit in equipment  
Mounting fee horn supports

- Folder 47, photos .1347a - .1347b**  
King Salmon site (Naknek) -- see also Box 4
- Folder 48, photos .1348a - .1349b**  
Clam Gulch site  
Showing location beside Sterling highway
- Folder 49, photos .1350a - 1352b**  
Diamond Ridge site (Homer) -- see also Box 3
- Folder 50, photos .1353a - .1355b**  
Pillar Mt. site (Kodiak) --see also Box 5  
Cable line and approach road
- Folder 51, photos .1356a & b**  
Bethel site -- see also Box 2  
A.C. & W. site
- Folder 52, photos .1357a - 1358b**  
Newenham site -- see also Box 4
- Folder 53, photos .1359a & b**  
Soldotna Site  
Location beside road to Kenai
- Folder 54, photos .1360a - 1365**  
Starisky Creek site
- Folder 55, 56, 57, 58**  
Weekly activity reports 7/6/57 - 3/1/5

**BOX 7            Miscellaneous Geographic Sites**

- Folder 59, photos .1366 - .1381**  
Air Force Installation  
Anchorage - Fire Island  
Kalakaket Creek (Installation at Campion  
Lisburne  
Romanzof  
Tatlina
- Folder 60, photos .1382 - .1383**  
Atlasta House  
AC & W Radome Location  
Proposed AC & W water supply

- Folder 61, photo .1384**  
Delta Junction site
- Folder 62, photo .1385**  
Glacier Point TD-2 site  
ACS Installation  
ACS Repeater building
- Folder 63, photo .1386**  
Nelchina site  
Location near Glenn Highway
- Folder 64, photos .1388-1420 (added later)**  
Unidentified 1957 Western Electric photographs and negatives. A.T. Rife, photographer  
Barge "Tanana"  
Installations, personnel and equipment at:  
Big Mountain  
Cape Lisburne  
Fairbanks (ACS building)  
Fort Yukon  
King Salmon  
Ocean Cape  
Sheep Mountain
- Folder 65, White Alice telephone directory, 10-15-1958.**  
(cataloged as a separate in the public catalog)

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Reference list associating towns with sites.

<b>Towns</b>	<b>Site Names</b>
Candle - Haycock	Granite Mountain
Galena	Kalakaket
Hinchinbrook Island	Boswell Bay
Homer	Diamond Ridge
Illiamna	Big Mountain
Kenai	Naptowne
Kodiak	Pillar Mountain
McGrath	Tatalina
Naknek	King Salmon
Nome	Anvil Mountain
Potter	Rabbit Creek
Tanana	Bear Creek
Unalakleet	North River
Wales	Tin City
Wasilla	Neklasson Lake