Mr. John Sater
25 October 2001
Brian Shoemaker
Interviewer

(Begin Tape 1A)

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BS: This is an oral history interview with Mr. John Sater, taken as part of the Polar Oral History Project of the American Polar Society and the Byrd Polar Research Center on a grant provided by the National Science Foundation. The interview was conducted by Brian Shoemaker in Mr. Sater’s home in Washington, DC, on the 25th of October, 2001.

John, I’m interested in your background. What led you and how did you come to get into the polar research business?

JS: Well, I got my baccalaureate at Ohio State in a program, I don’t know if it’s still going on or not – the Institute of Geodesy, Photogrammetry and Cartography – it was a supra-departmental entity run on the grad school level. Because it embraced so many different departments, mechanically it was housed in the geology department, but geology wasn’t even particularly part of the degree
program as the name of the Institute implies. And, as I say, it was principally for grad level people. Almost all of them were military, but there were two or three of us that did it at an undergrad level and my professor was Dick Goldthwaite. And so, when I graduated in 1954 - I was late graduating. I should have gotten out in ’51, but after stooging around in college so long, the Army wanted me, so I was drafted. And because of the background, they assigned me down here to the Engineer School at Belvoir to teach photogrammetry and at that time, Doc G was carrying on the glaciological research for CIPRE on the glaciers in Greenland, and he decided that he wanted a planometric map of one of the glacier faces. And so, he went over and talked to people in the Pentagon and I went over and talked to the Engineer Support Unit that was providing the peons and so I was transferred from a school to the first Engineer Arctic Task Force. And I went to Greenland in late spring of ’55, when the unit was beginning to work there and stayed there until my discharge in October of ’56.

BS: What was your job?

JS: Making a planometric map of one of the ice faces.

(50)

BS: Oh, I see. So, that was your project then.
JS: Well, it was Doc G’s project and I was the photogrammetrist. What we were doing was planometric photography. You take a picture of any moving surface from fixed points and draw a topographic map from it.

BS: Do you use aerial photography?

JS: No. It’s just planometric, ground-based stuff. It’s just rotated 90 degrees. The thing that’s moving is the ice face. The thing you wish to map is the ice face, not the surface.

BS: I understand.

JS: And it was the overall goal of the Engineer Task Force Unit – there was also a Transportation Department Unit that was based in Thule at that time – but, the engineers’ principal function was to build snow constructed runways out on the surface of the ice cap because with our national enthusiasm for building things ahead of time, we located Thule in one of the worst geographic settings in northwest Greenland that we could have possibly have done.

BS: Really.

JS: Well, the valley fills with fog and the fighters would go up on their exercises and the valley would fill with fog and they couldn’t land. And so they’d be scooting around trying to figure out what they were going to do and their radars in those days measured the distance to the rock subsurface beneath the ice, so the altimeter would tell him that he had 5000 ft of elevation and he had 5200 ft of ice
in between and the next thing he knew, he had just done a pancake very abruptly somewhere far out of walking distance. So, they wanted to know everything they could about the behavior of the Greenland ice sheet at the time.

They also built a tunnel into the ice sheet approaching it from the exposed land area near the base to study the motion there and the camp I was mapping was 50-60 miles away. But, my part and Doc G’s part was purely basic research with Army Research Office money and had no immediate practical applications. The snow runways had obvious ones and they were successful in compacting a landing strip of sufficient strength to sustain the weight of a fully loaded Globemaster – the old C-124s.

**BS:** *Out of snow.*

**JS:** They had a . . . the closest thing I can think of is a lady’s hair curler – a cylinder with a bunch of holes in it. And they shot flames in from both ends and the flames would come squirting out of the holes and melt the snow surface and then come chugging along right behind with a sheep’s foot roller and compact it. Just keep doing that over and over.

**BS:** *You say the curler would roll and squirt off.* . . .

(100)

**JS:** Well, you rolled it along the surface and the flame would be squirting out of the sides of the cylinder melting the surface or at least thawing it in part. And then
follow that up with a sheep’s foot roller or just a plain roller. Anything to compact the surface and just keep doing it over and over and over again until, in a sense, you have come close to building an ice runway. Just turn the annual snowfall into ice and speed up the glacial process by a couple of thousand years.

BS: *So, this turns the annual snow into ice and does the runway hold up all summer?*

JS: Sure.

BS: *Why haven’t we done it at South Pole?*

JS: Probably because the the thermal . . . it’s not warm enough at the South Pole. We were maybe 100 miles inland from Baffin Bay and I haven’t a clue now as to what the air temperatures were, but I guess they were at least 40 degrees warmer.

BS: *It’s higher there, too, at 10,000 ft.*

JS: Well, we were probably at 6000 ft. So, it’s the proximity to ocean. People forget that even though they are frozen over, oceans are hot. And just look at Alaska. Anchorage on a nice day is 70 in the summer. Fairbanks is 90. Barrow is 40. And in winter, Barrow seldom gets below 20 below. Very seldom. Fairbanks, I’ve seen 75 below. Anchorage, again, maybe zero. The fact that you’ve got 6 ft. of ice off Barrow doesn’t mean how cold. For Antarctica, we don’t have a convenient way to supply enough heat fast enough to achieve melting that would be necessary to get an accelerated compaction.
BS: Interesting.

JS: I don’t know.

BS: Well, when I was Commander down there, we went round and round and round as to whether we could get wheeled aircraft in there or not.

JS: I was there the day they landed that thing and it had whatever it was – an Abrams or some great whacking big tank on board – but, it was a total fizzle when it came to fighters because of the footprint pressure. Now, a Globemaster’s got twelve tires and they’re probably four and a half, five foot in diameter, so you’ve got a footprint of yeah, and those F-86s have maybe a two foot in diameter footprint about yeah size.

BS: And they sank.

JS: Well, they would have. They just had gutsy pilots who were willing to give it a try.

BS: Did they stop?

JS: No, never got that close.

BS: But, the Globemaster came in and stopped. They did a wonderful job in the Antarctic, too. Let me back up a little bit. You worked for Dick Goldthwaite or worked with Dick Goldthwaite. Mentor?

(150)

JS: Yeah.
BS: *Any other mentors?*

JS: No.

BS: *He was the guy.*

JS: Quite enough. Because when I left service, I went to work for him at the Ohio State Research Foundation and turned my photographs into maps for his report.

BS: *So, you went to work for Ohio State, basically the Byrd Polar Research Center.*

JS: Well, it wasn’t there then.

BS: *Well, it’s an outgrowth of his work. The people that he grew out of him put the Polar Research Center together and then the Byrd thing came along. So, that’s where this is going back to, where you got started. Interesting. So, you left the service, you went to work for Goldthwaite. Did you stay on there?*

JS: No, after I finished with the maps, I started looking for civil employment and went around to the various cartographic organizations. I don’t even remember the names. There’s one over in Beaver Valley, Pennsylvania. Makes aerial maps. There’s a big outfit in Philadelphia. Anyway, I ended up in Washington just as IGY was beginning. And I think that Doc G probably implemented things, I don’t know. But, he was on the Board of Governors of the Arctic Institute for many years. IGY was looking for somebody to make a survey of the surface motion of the McCall Glacier and that was in my training – civil engineering and so forth.
And at that point, one of the principal conduits that the Academy had for funds for IGY was the Arctic Institute. Federal agencies couldn’t hire bodies indiscriminately or in quantity, and so forth. They had to fob it off on somebody else to do that. So, that was how the Arctic Institute gained the prominence which it achieved during the ‘50s.

BS: *It did so for people going to work in Antarctica, too.*

JS: By a certain extent.

BS: *I’ve interview several people who got their funding for IGY through the Arctic Institute.*

JS: Well, it was the only game in town. When it began, there was no NSF, there was no NIH. All the money was Army Research Office, NRO or ONR, and AFOSR – Air Force Office of Scientific Research.

(200)

And those were the sources and I don’t know what the Institute’s cash flow was like, but there was a substantial amount of money that came through the Institute because we were the only entity that had the flexibility to hire people on the terms that Congress had given. So, then I spent the better part of two years living on the McCall Glacier which is northeastern Alaska up on the Romanzoff Mountains, just this side or just south of where all the Alaskans want to drill for oil these days.
And at that point, looking back, the Institute was run out of New York City by Walter Woods. Excuse me, the US Corporation was.

BS: *US Corporation?*

JS: Well, the Arctic Institute was a bi-national entity. There is a Canadian Corporation and a US Corporation and initially the first office was in ’47, in Baltimore with Linc Washburn. And then he went back to teaching and Walter took it over and then Admiral Colbert opened the Washington office. He was a retired geodetic survey admiral and then Bob Faylor came along. And he was the principal agent for ginning up much of the activity that we then got involved in in the ‘50s. But, in the meantime, I was there on the glacier. There were four of us. Two people involved in micrometeorology and two of us in measuring surface movement.

BS: *Who were those people?*

JS: Dick Huebly was station leader – Richard Huebly. And his assistant was Bob Mason. And I was the junior scientist and my assistant was Charles Keeler – Charlie Keeler.

BS: *Are these people available today? Any of them?*
JS: Last I heard, Bob is still in town. He left the Institute. He was at the
Smithsonian for quite a while. Charlie Keeler worked for CRELL and the last I
heard of him, he and his wife were raising horses in New Hampshire.

BS: *I think I have him on my list. I’ve got to do the whole New England
contingent. Tons of guys up there.*

JS: Oh yeah.

BS: *Some retired and some active still. I’ve been going in to get Linc a couple of
times, but Tao’s been sick.*

JS: I don’t know how long Charlie was with CRELL, but I know he was there
three or four years anyway.

BS: *I knew he was up there.*

JS: Well, he started . . . he’ll have to tell you what got him started.

BS: *Did Untersteiner show up there?*

JS: Oh yeah. Sure.

BS: *I think he mentioned that.*

JS: Because he and Huebly were cheek by jowl in the micrometeorology business
in those days. Another guy, I don’t know if he’s still around, was Austin Post, an
aerial photographer whose done as much photograph of Alaskan glaciers as
probably anybody. He’d be a little older than me.

BS: *How old are you?*
JS: I’m 71, so Austin may be dead by now. I don’t know.

BS: You’d be surprised. These polar guys seem to live a long time. I had an 88-year-old guy yesterday – Nate Gerson – and he’s going strong. Sixty-one years of government service. Amazing. I’ve got 30 years. So, anyway, I interrupted you.

Tell me about your work there on the glacier.

JS: You drill a hole in the surface of the ice and stick a dowel in it and then go off to the side and measure how much it moves. Well, you measure the angle, you get the angular distance from a fixed point to the dowel.

BS: From the periphery of the glacier.

JS: Yeah, from the moraine.

BS: Do you do both sides and then you triangulate it?

JS: No, you just do . . . you triangulate by having two observation points 300-400 yards apart. In the case of the McCall, it was all on one side. I don’t remember. We didn’t do much on the west side of the glacier. I don’t know whether it was the crevasses or stuff along the edge or what.

(300)

Charlie Keeler and Austin Post did an additional survey in which they climbed to the rim of the glacier to get data for an aerial photogrammetric survey which came later. They got the data and then the aerial photographs. I think AGS –
the American Geographical Society – Bill Field was the driving force in that particular bit of mapping. I’ve forgotten the details of it. I was not involved.

**BS:** *He had to be. He was involved in just about everything in Alaska that had to do with glaciers. I was quite close to him when he died. He got sick and moved to a retirement home. He was the treasurer of the Polar Society at the time and I was the secretary. So. were you there when this fellow committed suicide?*

**JS:** Yep.

**BS:** *Who was that?*

**JS:** Huebly.

**BS:** *I didn’t know that. I didn’t know who it was. I only heard the story, but no one’s ever discussed it. Did he give any indications that he was having problems or was it a surprise?*

**JS:** No. He got through the Navy psychiatric screening that they gave us before we went out, but that doesn’t surprise me because when a Navy psychiatrist interviewed Charlie Keeler and I after the death and we went back on again, I’m not even sure Huebly came into the conversation. We spent the whole goddamn time talking about fishing in Alaska and whether or not the captain would have a good time and enjoy it. So, Huebly’s problems could easily have slipped through. Mason was with him at the time and he took a .38 revolver which I had taken with me and a .45 that Charlie had.*
We were planning on popping wolverines or wiping out the bear population or god knows what, and Dick Huebly went up to the generator’s shed – a separate building – and disconnected the exhaust line and tried to asphyxiate himself. And that woke Mason up because he was sleeping in the main quonset building where the living quarters were and apparently that didn’t work because then Dick went 200-300 yards further down the glacier and simply laid down in the snow and stripped to his waist. And that’s all I know.

BS: *What time of year was it?*

JS: October.

BS: *So, the darkness wouldn’t have been a factor then.*

JS: Maybe sixteen hours then.

BS: *Yeah. Extended darkness.*

JS: Extended, but not total by any chance. Which is why I say . . . somewhere along the line I picked up the idea of homosexuality, but that’s scuttlebutt, purely.

BS: *That’s a shame.*

JS: I kept track of Mason for quite a few years after that and we never talked about it. And I have seen Charlie Keeler for quite a few years afterward and he and I have never talked about it either.

BS: *Well, your work was done. How long were you there on the glacier?*
JS: Oh, we went in in April and came out in early November after Dick died. And went back in early March and stayed until October.

BS: *What years were these?*

JS: ’56 and ’57.

BS: *April ’56.*

JS: Is that right? I got out of the Army. It was in May of ’56, because I was still at the Polar Center, so May of ’56 to October ’57.

(400)

BS: *So, for the start of IGY. There was no other group that came in after you.*

JS: No. That was where the aerial photography came in. They decided that putting a couple of grunts in and doing a manual survey, if you will, palled against the overall expense of doing it aerially and that they could get their data on glacier movement just as well by aerial surveillance as they could by . . .

BS: *Can they?*

JS: By and large, yeah.

BS: *I was a surveyor for California’s Division of Highways for four summers and I’m also an aerial photography pilot.*

JS: I did plenty of that. I did aerial photography during the time I was in Greenland. I think that was one of the things the Engineer’s Task Force liked about me was that I had taken my own speedographic down to the base with me,
down there to Belvoir. And I took it to Greenland and used it to make aerial photos. They were building a dirt road up the ramp of the ice sheet and they wanted a photo-metric map of the road surface. So, I had done that for them out of the belly hatch in an Otter.

**BS:** *You just hung out. I’ve done some of that. I’ve found though that you need periodic ground troops to check your results from aerial methods.*

**JS:** I’m sure that that is probably the case in this point in time. But, as far as I know and I can’t guarantee the statement, but there has been no further on-the-ground work on the McCall glacier.

**BS:** *I had to fly a lot of repeats of Operation Highjump stuff in Antarctica because we had no ground troops on any of it. They just took a lot of photography. So, what did you do after that?*

(450)

**JS:** Oh, then I was on the AINA payroll for that work and then I came back here and worked in the Washington office.

**BS:** *This is the Washington office of . . . ?*

**JS:** AINA. And after the field work of the McCall was over, then I went back to Columbus and drew up the two maps that I had prepared or taken the photography for showing the position of the glacier front. Wait a minute. I’m way out of synch for chronology here. I’m talking about after the McCall. After the McCall, I went
back to Columbus and worked at home and reduced the data and wrote a report setting forth my findings in terms of the movement of the ice on the lower tongue of the glacier. And then I came to DC. And I don’t remember what sort of things Faylor had me doing. The principal product was a book called “The Arctic Basin,” published by the Institute. It had a chapter on any science or activity that was relevant to the Arctic and what I did was – and this was Leonard Wilson’s money from the Army Research Office - for a modest stipend, we conned knowledgeable people in each of these fields into writing a short paper and I edited them into a volume which promptly got me invitations to the Soviet Embassy parties for a while.

(500)

**BS:** How long did it take you to put it out?

**JS:** I don’t remember.

**BS:** But after that, you got involved with IGY.

**JS:** IGY was over.

**BS:** Over by then. OK.

**JS:** MCCall glacier was IGY. Then, along in there, one of the things that I was doing while I was here in Washington at that time, there was a guy by the name of Gazateliiki who I never met who had been working with the Air Force studying sea ice in the Beaufort Sea. And Max Britton decided he needed some help in it so I
was a sub-contractor of ONR through the Institute doing aerial photography of the ice off the Alaskan coast with aircraft that Brewer supplied.

**BS:** *This was the early ’60s?*

(550)

**JS:** No, this was late ‘50s. And it was something less than a howling success because there just wasn’t the money to do regular, sustained flights, single engine birds – you couldn’t take them very far. So, then that mostly occupied ’58 and ’59. The summer of ’59, I went to Davisville, as the USARP Rep handling shipments of all the scientific gear.

**BS:** *So, you were at Davisville, interfacing with the Navy.*

**JS:** Worked with Lieutenant Hutchins.

**BS:** *Who was the Admiral then?*

**JS:** Dave Tyree. Well, I can’t be sure of that. Yes, I can too. Because I wrote a letter when the job was done, I wrote a letter to Hutchins and thanked him for his help and his cooperation and Tyree sent a letter back to the Institute thanking the Institute for my letter. That was Dave Tyree. He was a gentleman’s gentleman. The old Southern true gentleman sort of person. He was my employee later on.

(600)

**BS:** *So, you worked with him.*

**JS:** I never saw him at that point. In Davisville, my sole contact was Hutchins.
BS: And that was Tom Hutchins?

JS: Too long ago.

BS: He was the supply type – uniformed supply type?

JS: Uniformed . . .

BS: Supply officer. Yeah.

JS: My only other contacts were with the CPOs because I was a civilian on the base. I was an anomale and I wasn’t quite accepted in the officer’s club. Nobody had any problem with me at the NCO club. So, I learned a lot from the NCOs.

BS: Well, if you did it with the right guys, those guys got it done. I ran Deepfreeze through my chiefs. Officers develop programs how to carry them out, but I asked the chiefs to carry them out. When the going got tough, I had several chiefs that I could count on.

(End of Tape 1A)

(Begin Tape 1B)

(000)

BS: OK, you were USARP Rep with Dave Tyree. Did you go to the Ice with Deepfreeze?

JS: Not with Deepfreeze. I was the US Rep to the British Antarctic Survey.

BS: Was that right after this period?
JS: I think so, assuming it was the summer of ’59 and I was in Davisville. Somehow or other, I’ve pegged it January 1 of 1960, that I was in Rio on my way south to pick up the Danish ship that took us down.

BS: Megadan?

JS: Quistadan.

BS: Quistadan. And where did you go? Which British operations?

JS: We went down the west side of the peninsula. We tried to get to, I don’t know the name of the British base that’s on the west side of the peninsula. It’s way down on the Bellinghausen there. We didn’t make it and we almost didn’t make it out. We spent six weeks hove over 15 degrees to port waiting for the Glacier to come by.

BS: Wow. The Glacier helped you out?

JS: Glacier got us out.

BS: Did you get any research done?

JS: No, it was not a research . . . it was pure supply. It was Bunny Fuchs first year back since he walked across the continent and he wanted to see what his stations were doing. We stopped at all of the ones up in the Drake Passage and the one that’s in a volcano.

BS: Deception?

JS: Deception.
**BS:** Lockroy?

**JS:** Lockroy. We went around to the northeast corner of the peninsula to see the station there, or there was. Then we went down to a couple on the west side of the island. Island stations.

**BS:** Yeah. That's Faraday. The reason I ask all of that, for the last seven years I went down there with tourists. They go into Lockroy which is a museum now. Faraday has been turned into a Ukrainian station. It's still locked into the British science computers and everything. Stonington Island was the one I think you were trying to get to. They've move that across the bay for easier access. They're still down in the same area and that's now their chief base. They have a runway there, so they fly in in the winter. Fly people in an out any time. It's changed. In fact, that's how they move people back and forth.

(50)

**JS:** We were on the Quistadan because the John Briscoe, the regular British vessel, was taken up with other things. But, we and the Briscoe were in this little dinky harbor one day when a real gale came up and the bow of the Briscoe sheered the wing off of an Otter, I guess, and it sat there spewing gasoline out of the tank and one of the deckhands flipped his cigarette through it.

**BS:** Deliberately?

**JS:** I don’t think so. He just wasn’t thinking. It would have made the biggest mess.
BS: So, you were with Bunny Fuchs and he never made it back there to Stonington Island, huh? He was in charge of the program by then, wasn’t he? The British Antarctic Survey? So, how’d you get along with Bunny?

JS: All I remember is that Dave classified my report.

BS: Because he didn’t like what you said about the press?

JS: Unfortunately, I didn’t keep a copy of my report so I haven’t any idea now what I said, but Dave didn’t like it.

BS: He didn’t want it in the Brits hands.

JS: He didn’t want it in the Brits hands.

BS: Like you said, he’s a gentleman, huh? It’s actually an illegal classification. There are rules on classifications and they bend them.

JS: Well, I don’t know what . . . he surpressed it, let me say. I don’t know that he actually classified it in a technical sense.

BS: That was an interesting period of time because the Antarctic Treaty had been negotiated and it was up for signature for ratification for all the nations. It wasn’t ratified until June of 1961. So, it was in limbo. So, people were minding their Ps & Qs because they wanted it signed. Everybody wanted Antarctica out of the Cold War, including the Soviets. I wrote a paper on the Treaty at Cambridge. After I retired. I took a year sabbatical in Europe and made a home in Cambridge. I worked out of Scott Polar and used their notes, but the British Foreign Office and
the State Department funded my research for the paper for the renegotiation of the Treaty. So, I met Bunny. He lived just down the street and of course, was retired. Gordon Roeblin.

JS: I’ve never been to England.

BS: Gordon was the guy who followed Bunny. I shouldn’t say that. Gordon was the first director of SCAR and a contemporary of Bunny’s in a much different sense. He was on the ’46 expedition – the Norwegian-British expedition.

JS: There was another boswain, if you will, along with the grunts who was, I don’t know, professor of geology at Cambridge? I just remember he made a fourth at the table because Bunny and he and the Captain and I made up a table. And he was totally different from Fuchs.

BS: Big man?

JS: No. Stubby, chunky chap.

BS: I don’t know. I met a lot of them. A lot of them were at Stonington Island when Finn Ronne was right next door. Like Kevin Walton, who was a very good friend. He was the dog sled guy. So, 1960, you come back I assume after what sounds like a lot of fun.

(100)
JS: Well, one of my giggles was the night the *Glacier* came over and broke us free and the two ships laid along side. I’m sure that Dave invited Bunny over for drinks and that sort of thing.

**BS:** *Tyree was aboard, huh?*

JS: I had better ideas than that, so since *Quistadan* was wet and I knew the *Glacier* wasn’t, I picked me up a bottle of Cutty Sark and found the photographer’s mate and he whisked me off to the darkroom and we sat in the darkroom with his buddies working on the Cutty Sark and it turned out that Dave was looking for me. When he found out there was a Yank on board, they looked all over the goddamn ship and Bunny had put on fairly decent clothes. Dave may have even been in uniform. He was in uniform all the time. And I was like now, only more so and one of the reasons I remember it is that I was wearing mocassins in which I’d used a strip of three inch packing tape to hold the sole on and when they finally found me, I got hauled up to the officer’s country in this garb which Dave reminded me of several years later – most inappropriate garb in that part of the ship.

**BS:** *Quistadan was civilian run. It's a civilian ship, right?*

JS: Oh, sure. Twenty-eight Danes, 27 Brits and me. And I got all the sour grapes from both sides.

**BS:** *So, what did you do? Where did you go after that?*
JS: Well, I came back here to the Washington office of AINA and ran symposia. I did a revised edition of “The Arctic Basin.” A couple of the symposia were Max Britton’s money – Max and Ron’s.

BS: Ron? McGregor?

JS: McGregor. I think Ron was there by that time. And I think I continued to hop up to Barrow and do photography for Max and Ron, or the two Max’s. And then, in October of ’62, I went aboard as station leader on ARLISS II for the first winter.

BS: How long were you out on ARLISS II?

(150)

JS: Until the following May.

BS: So, September to May. Which year was that?


BS: How far did you ride it? Where did you ride it from?

JS: We were west of Wrangell Island. I can’t give you the longitude.

BS: So, you were down pretty far, close to Alaska.

JS: No, we were northwest of Wrangell Island.

BS: You were right in the middle of the Transpolar drift there.

JS: Yeah. I followed the plots later on. It looped around and in ’64 and ’65, it came down off the Canadian islands and came back north of Alaska again before it finally exited. That was T-3. I’ve forgotten what the fate of ARLISS II was.
BS: It kept going out after you and down through the Denmark Straits. That took several years. I spent two seasons on T-3 and then I was commander at Point Barrow and I had to close it. Joe Fletcher gave me an awful DET. It was his money, or due to the lack of his money that we had to close it. We had AJAX going. We needed the generators very badly to power our camp. We didn’t have money to buy new ones, so T-3 was stuck up by Elsinor Island. It hadn’t moved for two years and we weren’t getting any science data. We were just sitting there. So, I said, “Close it.” Joe called about closing the island and I told him he didn’t give me enough money to run AJAX, so take your pick. You want me to reopen T-3 or do you want AJAX? And he wanted AJAX. He didn’t have any choice anyway. I was just jerking his chain because he was out of the loop by then. Untersteiner was in charge by that time.

So, tell me about your experiences out there. You rode it through the winter.

JS: I loved it.

BS: Solitude?

JS: Well, no. I don’t call 13 people solitude. I’m a night person. I’m much happier in 24 hr. darkness than I was in Greenland, or for that matter in Barrow in 24 hr. daylight.

BS: Did you have a science project of your own?

JS: I was just a gopher.
BS: You had a number of projects going up there, though.

JS: Oh, you mean on the station. Oh yeah. Sure.

BS: Which ones were they?

JS: Oceanography.

BS: Who did that?

JS: University of Washington. Phil Church. No, Phil Church was meteorology. He had the meteorology program. The oceanographer was . . . I can’t tell you. Marine biology was John Moore, USC. There was a marine acoustics program.

BS: Bo Buck? Bo Buck’s guys?

JS: Bo Buck’s guys. And there was an aurora program which would have been Dick Fisher. University of Alaska?

BS: I knew him.

JS: I haven’t had to refer to a name for a while. I think that was it.

BS: I enjoyed it out there. I enjoyed wintering in the Antarctic.

JS: Oh, I guess one of the highlights was – I’ve forgotten the chronology or timing of it, but at one point – and I stayed at Barrow for another couple of years – but at some point in there, Bobby Fisher and his faithful mechanic, Frank somebody – a Black man – delightful guy.

BS: His kids are up in Barrow today.
JS: Really?

BS: Yep. And Bobby’s son’s there. I was up there two years ago with Max Britten. And we had the 50th anniversary, and Bobby Fisher’s son was one of the Pizavalik dancers. Kind of neat.

JS: Well, anyway, somewhere along in that period of time – it would have been April of ’63 – Frank and Bobby found one of the Soviet stations, one of the NPs and landed on it, just cold cock. Circled it a couple of times, dipped it’s wings, lowered the wheels and came down. Everybody had a glorious time. The Russians didn’t speak English and our two guys didn’t speak Russian. But, everything went swimmingly anyway.

BS: So, they just landed for a drink, huh? A few drinks.

JS: Whatever. A couple of weeks later, a Soviet bird – an Antanov – flew over us, circled the runway a couple of times, came down close and took off like a scared goose. We never saw it again.

BS: Over ARLISS II, huh?

(250)

JS: It apparently was not very impressed with the landing strip on ARLISS II.

BS: It’s interesting because that Antanov was probably a better plane than anything we had up there for stall landings and the open field.
JS: And it would gear down and the cargo door would open and then all of a sudden . . .

BS: *He might have gotten orders not to.*

JS: Who knows?

BS: *So he never talked on the radios or anything. So, when you were on ARLISS II, who were you employed by, the University of Alaska?*

JS: Yeah.

BS: *Did you then stay on with the University of Alaska at Point Barrow?*

JS: At Barrow.

BS: *What did you do at Barrow?*

JS: Supply.

BS: *And you were there a couple of years.*

JS: Yeah.

BS: ’63?

JS: I left in February of ’64.

BS: *May ’63 to February of ’64.*

JS: I was inventory, trying to figure stuff out. I remember going through reams and reams of paper with a guy named Bill Gerkin. A monitor over at Hopkins. Trying to figure out whose property was where and how much of it, that sort of paper pushing.
BS: How’d you get along with Max and John?

JS: Excellent, I think.

BS: Good rapport then, with them.

JS: Well, I’d been working with Max for five years by that time, so he knew what he was hiring and he asked me to stay on.

BS: Max is a good friend of mine. Some of the researchers that came through had trouble with Max and I’ve interviewed them and there’s pros and cons. Some did, some didn’t. Some got along swimmingly because they knew how to handle Max, or vice versa, who knows? But, John was always an intermediary. If these people were having trouble with Max and they didn’t have the sense enough to go to John, they didn’t get anything done.

JS: Oh, there was one guy there during my stint that Max would ask everybody to leave that quonset where his office was and they’d get into screaming matches. You could hear the screaming matches over in the BOQ. And there were three or four of those. And it was the same guy. A PhD student.

BS: So, after Barrow?

(300)

JS: I came back to AINA here in Washington.

BS: And your job?
JS: Oh, again, managing symposia. I don’t remember the dates on it now, but I coordinated the North Water Project.

BS: That was a symposium?

JS: No, it was a field project.

BS: And where was that?

JS: The north water of Baffin Bay. Coachman and Robin Munch were the physical oceanographers. Max Dunbar and I don’t remember who his kiddies were or the marine biologists. I don’t know. Fritz Mueller of the Swiss Institute of Science and Technology were the glaciology types. Sven Orbik, McGill, was the meteorology. They must have found out as much as could be found as to why the north water is there. Year after year after year.

BS: You talking about the Polingna? The big Polingna?

JS: Yeah. And I guess you could say it culminated in a spring sojourn of the Canadian Coast Guard vessel St. Laurent which tried to get into the north water in like February, latter half of ’67, maybe ’68. I wrote a paper – well, Coachman and Robin wrote several papers. I wrote a brief summary of the trip. We failed to make it because the St. Laurent was designed to work in the St. Lawrence and she just didn’t carry enough fuel and we had to work too hard. We didn’t get close. Disko Island, maybe. There was interesting data in that no vessels had gone in at that time of year, so it was helpful, but we didn’t get up to the Poligna. Although Mueller’s
crew I think he kept on a little bit longer and got some more micromet data which was helpful because it’s as much an atmospheric phenomena as it is an oceanic one. So, that was that.

**BS:** *I want to back you up with a question here. You’re in and out of the Arctic Institute. Did somebody direct it during this period of time?*

**JS:** Bob Faylor. Robert Faylor. Well, he was the director of the Washington office.

**BS:** *For how many years was he there?*

**JS:** I would guess ’57-’71. I’m not quite sure when he got there.

(400)

**BS:** *OK.*

**JS:** He’s out in the LA area now.

**BS:** *Retired?*

**JS:** Yeah.

**BS:** *OK.*

**JS:** He’d be an interesting contact for you.

**BS:** *Yeah, if I can locate him. I have a run to southern California. An awful lot of polar guys head south when they retire to Florida.*

**JS:** He can tell you a lot about the Arctic Institute, if you’re interested, organizationally.

**BS:** *I’m very interested in it.*
JS: And if you’re digging into my memory about Arctic-y things, the first summer of ’64, when I first came back here to Washington, I spent on the ice field ranges in the Yukon doing a survey of ice motion.

(450)

And I don’t remember, but I think it was for Goldthwaite, or the data went back to him. I didn’t compile them. But, he had several people. He had another chap that went up and did glacier studies on Mt. Logan. Army Research Office had a party that was studying mountain terrain and glaciers and stuff headed by Melvin Marcus who ended up at New Mexico. I don’t remember where Mel was at the time. Michigan, I think. He was a geographer. But, it was at the time of the Himalayan conflicts with India and China and so forth. Army Research Office wanted to find out about mountain glaciers and terrain and stuff like that, and so they were all intermingled – the studies that were going on there. And I’ve probably left out a program or two.

The Canadian Corporation of the Institute still operates a field research facility at Kluane Lake in the Yukon and that was where we were based at that time.

BS: *They were at Kluane Lake?*

JS: Summer of ’64, I was doing that. And then later on, I got into the North Water stuff. That was the last field work that I did.
BS: There was an office here run by Faylor. Is that correct?

JS: The one we’ve been talking about the whole time.

BS: Yes. Where was it located in town?

JS: We started off in the basement of the Carnegie Building.

BS: That’s when you moved down from where? Baltimore? To DC, Carnegie Building. But you got over to Arlington somehow, didn’t you?

JS: Well, then we bought a building on 1619 New Hampshire, Ave.

BS: And how long were you there with AINA?

JS: I think I was there from ’58 until ’71. We closed New Hampshire Ave. in 1971, and moved to Arlington on Washington Blvd.

BS: And how long was it there in Arlington?

JS: I think I closed it in 1980.

BS: What then?

JS: Well, the big activity that engaged us while we were there was a contract with ARCO to provide sea ice forecasts for their Theresa Black into Prudhoe. And Walt Whitman worked for me as the ice man, so to speak, and Bill Dean – did you ever hear of him? A former Navy Lieutenant Commander Dean, he may have been ice patrol, something of that sort. He had a background in it. And I subcontracted with
him. He was a private individual at that time. Had his own little business and he did the meteorological analyses. But, that first year at Prudhoe Bay when they had, what was it, two and a half billion dollars worth of hardware sitting on barges and the wind changed. They decided they’d better get somebody that knew a little bit more about the north coast than they did, so they came to Walt and Walt came to me and we got together with Bill Dean and a meteorology student that Walt had tutored, helped, did computer modeling of some of the atmospheric circumstances.

BS: *Pretty good money then, from the oil companies?*

JS: Oh, I don’t know. It was a six, seven person program. And we did jolly good after the fact type stuff.

(End of Tape 1B)

(Begin Tape 2A)

(000)

BS: *This is Tape 2 of the John Sater interview on the 25th of October, 2001. We were talking about Prudhoe Bay.*

JS: We relieved a lot of feelings and angst on people, but our forecasts were only, I think, moderately valuable to them. Fortunately, the gods did not send them another summer like that one. Our hindcast was fantastic. Once we looked at the data, we could have told them in March of that year what they were going to get clobbered with in August.
BS: I guess I ought to back up. You were doing forecasts for AINA. You took over when?

JS: I took over from Bob, I don’t know when it was. Somewhere in the ‘70s.

BS: And that was when you were in Arlington. So, did you have a staff here?

JS: Not much.

BS: Secretary?

JS: Couple secretaries, people to help with the forecast and get it together and fax it out to all the anxious, angst-ridden CEOs and stuff like that. But, quite small. And then I closed it. I just got tired. It was the only money coming in the office and I got to feeling that we weren’t supplying the companies with relevant data. It was hand-holding and not much more. So, I just closed the office and turned the contract over to Bill Dean.

BS: Bill Dean being . . .

JS: He was the sea ice man.

BS: But, where was he?

JS: He was based in Suitland. That’s why I say, I think he’d been ice patrol background. That’s where he got his stripes. Navy ice patrol type out of Iceland.

BS: Coast Guard?

JS: No, he wasn’t Coast Guard. Navy. Ron can tell you. But, apparently when they entered in the new contract when I turned it over to Bill and the oil companies
were thinking along the same lines, they wrote a different contract from the one they’d given to Walt and I and I found out about this indirectly, but there was a penalty clause.

**BS:** *You mean if the forecast wasn’t good?*

**JS:** Right, or something of that order of magnitude. And it brought Dean up short and he had to go out of business. He had lost Walt and Walt’s knowledge of ice and he had lost a meteorologist.

(50)

**BS:** *So, he didn’t do a good job.*

**JS:** Well, and the seasons changed and the companies improved.

**BS:** *They learned to do it all.*

**JS:** And I suppose they’re doing it on their own now. I haven’t followed it. And that was it. I just closed the place down roughly in ’80.

**BS:** *So, you closed AINA in 1980, or thereabout and then you wanted to back up.*

**JS:** It was during the winter I was on ARLISS II, it taught Brewer and Schindler never to fly on the same airplane. The island had been initiated by icebreaker that summer and they had left a cache of fuel drums and by October, they were pretty well covered with rime. And there was a great stack of diesel in one place and there was a smaller stack of av gas in another and Max and John came out and Zimmerman who was the pilot on the DC-3, to see how I was doing, and kiss us
goodbye before winter, total darkness, etc. And the mechanic, Frankie Yapik rolled a couple of drums of av gas out of the stash and topped off the tanks on the plane. And we all had coffee and kissed each other goodbye and so forth. I left the beacon on for about an hour and then figured what the hell, and turned it off. In the meantime, Zimmerman had himself some engine problems and one of his engines gave out because they suspect a mechanical problem of some sort or another. So, he just switched to the other tank. Unfortunately, we had loaded diesel fuel and somewhere between Wrangell Island and Barrow, Zimm had to put down in the dark on the pack. And in the meantime, I had gone down to roll the empties off to whatever we did with empties. We put them on another stack and happened to realize that we had put the diesel in. I read the stencil on the top of the can and I radioed to Barrow and let them know. And began the big search for the bosses. That was a quick way to get a promotion in my job, you know, because I would have been the third in line. Taken over the lab.

(100)

But, it didn’t work. They found them. DC-7s out of Elmendorff.

BS: So, the Air Force set up a search.

JS: Set up a search and brought in a four engine bird to pick them up.

BS: Landed on the ice?

JS: Sure.
BS: *How was the R4D? Did they belly it in?*

JS: Yeah.

BS: *So they damaged it when they landed.*

JS: Well, it was so rough that I don’t think he had any alternative because he didn’t have that much chance to look around. He simply had to put it down where he was when he lost power.

BS: *Well, it’s standard procedure if you’ve got to make a rough terrain landing, you just want to get down and save your life. Your chances are a lot better if you leave the gear up because you’re liable to nose over.*

JS: Well, no power.

BS: *You can nose over. If it’s a nice flat runway, you can go in on your wheels, or if you can find a refrozen lead, you can land it on your wheels. We had a guy with a C-130, Air Force, in Antarctica. First C-130s down there. National Guard. Lost all four engines. Of course, he’s got the whole Ross Ice Shelf. Big flat area. No crevasses apparent. So, he puts his skis down. A C-130 is easy to belly in. That’s just an easy, easy plane to belly in if you want to save your life, but he wanted to save the aircraft, too, so he put the skis down. Turned out there was a mechanical change you needed for cold weather ops in the engine, so that’s pretty rare. I think most guys would have elected to just put it down and get out and let someone come*
get them. It took about a week to find these guys, but they had a camp set up. They were cooking steaks. C-130 carries a lot of survival rations.

JS: There weren’t that many rations for them on the R4D.

BS: There’s a trade-off – fuel for rations. Most pilot will pick fuel to go further.

So, I’m glad you mentioned that because both Max and John had discussed it as well in their interviews. But, I didn’t know what happened on the ground. I didn’t think to ask what caused it other than a bad engine.

JS: I don’t, at this point, know why they suspected a bad engine.

BS: Max said that he told them to turn around because they were over open water and to head for the ice when they first started having trouble because the ice was safety. If you come down in the water, you’re not going to last long.

So, you said that you closed the office in 1980.


BS: You had a big library there, as I recall.

JS: A moderate one.

BS: Moderate one, yeah.

JS: And I gave most of it to George Washington University. And I imagine a fair amount of it went into the dumpster. The Institute, mind you, the joint corporation – the Arctic Institute’s principal library was in Montreal, in the Montreal office.
While they were in Montreal, but the Canadian Corporation has since moved to Calgary and took the library with them. But, they made that move – the Montreal office, I think, was established in 1947, about the same time as the Baltimore one because it was the same body of people. World War II types who had been involved in the polar regions that wanted to insure that as much of the information that they had garnered about the region was maintained in an accessible fashion. One Board of Governors ran the two corporations. They had to follow the respective national legal requirements for corporations, but they’d sit around the table and have a board meeting in the name of, say, the Canadian Corporation. Tidy things up, adjourn the meeting, stand up, walk around the table once, sit down, hold the meeting of the US Board of Governors, accept the minutes of the previous meeting and they’d satisfied both requirements. Same body of people would fulfill the two.

**BS:**  *And they did that for what, 30 or 40 years?*

**JS:** They did that until the Canadian office moved to Calgary and in so doing, became an agency of the University of Calgary. But, there is an Alaskan office of the Arctic Institute, and they have a Board of Governors. And there is a Board of Governors for the Canadian Corporation also. And the chairmen of the two boards are ex officio on the opposite boards.

**BS:**  *Where is this Alaskan office?*
JS: Fairbanks – University. I think it’s been a museum most of the time.

BS: Who heads that up now?

JS: I have never had much faith in the University of Alaska.

BS: I haven’t either, but . . . I had them as my contractor at Point Barrow.

Let’s just end it here. We’re just kind of wrapping things up with John Sater.

Thanks, John. It’s been a good interview.

(End of Interview)