The Association for Diplomatic Studies and Training Foreign Affairs Oral History Project

TERESA CHIN JONES

Interviewed by: Charles Stuart Kennedy Initial interview date: July 2, 2007 Copyright 2007 ADST

TABLE OF CONTENTS

Background	
Born in the USSR of Chinese diplomatic parents.	
Raised in USSR and US.	
Parents	
Life in Tashkent	
Communist take-over of China	
Settling in New Jersey	
University of Pennsylvania	
Religion	
Chinese history and folklore	
Nixon opening to China	
Marriage	
University of Pennsylvania; Chemistry Program Student	1959-1963
Reasons for choosing Penn	
Fellow classmates	
Ph.D, 1966	
Vietnam War	
Agriculture Department Laboratories	1966-1968
Wyndmoor Agricultural Research Labs.	1,00 1,00
Washington, D.C. Dairy Lab.	
Chromatography	
Paris, France; Institute Pasteur: Post Doctorate	1969-1971
Wife of Foreign Service Officer David Jones	
Birth of twins	
Vineland, New Jersey; Substitute Mathematics Teacher	1971-1972
Dealing with problem pupils	17/1-17/2
Dealing with proofen papits	
Entered the Foreign Service in 1974	1974

Washington, DC; Arms Control and Disarmament Agency 1974-1976 Verification technology issues Binary chemical weapons Chemical, Biological, Radiological (CBR) Warfare Three Mile Island Misconception of nuclear reactor vulnerability Destroying a nuclear reactor Iraq's Osirak reactor India's Peaceful Nuclear Explosion Intra-Agency bickering Soviet technology Leave without pay 1976-1978 Accompanied husband to NATO Ambassador Strausz-Hupé 1978-1980 Brussels, Belgium; Consular Officer Fleming/Waloon relationship Visa cases Environment Holzman Amendment Congressional interest Iran State Department; Oceans, International Environmental and 1980-1982 Scientific Affairs (OES); Scientific Officer Non-Proliferation and Export Controls **Nuclear Export Controls** Pakistani nuclear program Mr. Khan's theft of centrifuge plans VELA satellite ballistic missile launch detector President Carter and US nuclear power program Indian Ocean, South Atlantic Event Working environment Shorted Locating Indicator for Electromagnetic Radiation (SLIFER) Soviet negotiations State Department; INR: Political-Military Affairs Officer 1982-1985 Director Hugh Montgomery Working Environment Arms Control and Disarmament Agency: State Dept. Rep. Soviet technological capabilities Telephone technology Personalities

East-West Trade

COCOM

Soviet Europe pipeline project State Department; East-West Trade; Export Controls (EUR) 1985-1987 **International Economist** COCOM (Wassenaar Group) Agencies' differences in aims Operations Examples of scientific research **Duties of Science Officers** Soviet biological warfare production High Speed Integrated Circuits example **Nuclear Submarine Detectors** Toshiba problem Hughes Helicopter diversion by North Korea State Department; FSI; Economic Training 1987 Una Cox Chapman Fellowship Critique of course State Department; Oceans and International Environmental and 1988-1990 Scientific Affairs; International Relations Officer Office of Science and Technology Cooperation Scope of international agreements American Assn. for the advancement of Science fellows Circular 175 memos 1991-1992 State Department; FSI; French language training State Department; Board of Examiners 1992 **Examination Process** Case study method Candidates' qualifications Critique of process Montreal, Canada; Political/Economic Officer 1992-1994 Meech Lake Accords collapse Quebec separatists Economic factors in separation issue Influence of France Quebec-Ontario relationship Anti-American bias in school **Atlantic Provinces**

Supercomputers Export Controls

Chinese illegal technology transfer

Ottawa, Canada; Economic/Scientific & Technical Officer

National Institutes of Health problem

Universal Health Care

US-Canada Boundary Waters Treaty

Environmental controls

St. Lawrence River pollution

US-Canada shared water issues

Department of State; Counseling and Assignments Officer

1996

1994-1996

Problems with efficiency reports

General Comments on the Foreign Service

American Association for the Advancement of Science (AAAS)

China visit

Japanese and Korean Embassy Science Counselors

Circular 175 Process

Environmental issues

National Oceanographic and Atmospheric Agency (NOAA)

China studies

Intellectual Property Rights

Individual assignment issues

Views on individual Secretaries of State

Global warming

Appointment of Ambassadors

Cone system

Freedom of Information

INTERVIEW

Q: Today is July 2, 2007. This is an interview with Teresa Chin Jones. This is being done on behalf of the Association for Diplomatic Studies and Training, and I am Charles Stuart Kennedy. You go by Terry.

JONES: Yes.

Q: Well, Terry, let's start at the beginning. When and where were you born?

JONES: I was born November 30, 1941, in Novosibirsk, USSR.

Q: All right. So we want to figure out how you came to be born in USSR in Novosibirsk.

JONES: Well in the summer of '41 Hitler invaded the Soviet Union. My father was a Chinese Nationalist diplomat assigned to the Chinese embassy in Moscow. They sent all the diplomatic dependents to Novosibirsk for safety. My mother still remembers going on

the train to Novosibirsk, which was just packed with diplomats and their children, and looking at the troop trains going endlessly in the other direction. She doesn't think too many of those troops ever made it home again.

Q: These were the Siberian divisions that were brought in that sort of turned the tide in the battle for Moscow.

JONES: Well they were a never ending stream of men. Once my "expectant" Mom and Dad got to Novosibirsk, they settled in nicely, but on November 30, she fell down a flight of stairs. She was eight months pregnant when I was born. Even Chinese, coming from wartime China, were horrified at the sanitation standards at the hospital. Doctors didn't wash their hands and wore their outside boots into surgery.

It was no surprise when Mom developed peritonitis - considered 100% lethal before antibiotics or even sulfa drugs existed. But fortunately, at this point in time Stalin wanted the Nationalists as friends, so Malenkov (the Soviet Minister of Foreign Affairs) listened to my father's complaints that a total incompetents dealing with my mother and actually ordered one of the better surgeons in Moscow to go there and take care of her. With no antibiotics, they could only operate to drain the pus that developed internally - at a rate of two operations a week. She was down to about 80 pounds and after several months during which she weakened steadily, they were sure she would die.

A good friend of hers, a Eurasian, the Polish Chinese wife of a Chinese diplomat and a very devout Catholic, managed to somehow find a priest to give my mother last rites and to baptize me -- Teresa, after her favorite saint. She also gave my mother the very last of her holy water from Lourdes which she had gotten years ago when on a pilgrimage.

My mother, then came out of the coma and, at age 85, is frail but still healthy. As my mother told us, she remembered that she died and was greeted by a little boy and a little girl carrying a lantern -- spirits whom traditional Chinese believed were there to escort dead souls to judgment. She prepared to go when she heard a loud voice tell her, "Not your time" - thus shocking her out of her coma.

She still had months of hospitalization during which her Russian became superb. She was 20 years old and a high school graduate, which was considered very well educated for a Chinese woman then. By the time she came out of the hospital she could read War and Peace easily in Russian; she could go to plays; and she could bargain for food in the bazaars.

After Novosibirsk, my father was send to be the #2 at the Chinese Consulate General in Tashkent. I have only vague memories left of growing up in the Consulate General compound in Tashkent. The Consul General was also named Chin and also from Northern China. It was a busy enough post as there were large numbers of Chinese, probably illegal laborers, who got into trouble with the Soviet government. For example, at that time the easiest thing to get in the world was a Soviet Citizenship You went in to

get a ration card, they put your thumb on a card and they told you, "You are now a Soviet Citizen." So there was a whole lot of pleading and begging at the consulate.

The area itself was strongly Muslim; and the locals often looked very Asian-probably as a result of centuries of Mongolian control. Even under Stalin there was very high crime, for example, the policeman in front of the Consulate gate was murdered. For security the consulate bought a half wolf-half dog hybrid from the city zoo. So growing up I had the strongest impression that dogs kept their tails between their legs and howled.

Q: But first let's take your family. What do you know about your father's family? What was the family name and where did they come from?

JONES: Mo father's family name is Chin (Qin) which is written as the same Chinese character as the Chin emperor. But since the Chin emperor's name wasn't Chin, the actual family descent was from a well known Chinese Robin Hood who may not be quite the Sherwood Forest type. I was told he was a courier, who fell ill while waiting for a response to his message. His horse, his armor, his sword all got taken to pay for his care. Once recovered, he wanted to retrieve his sword - a family heirloom. The locals said, "Well too bad. The sword has been bought by a bandit king in the mountains. You will have to go get it from him." He went to take the sword by force from the bandit king and ended by talking and drinking with his new found soul-mate. They talked and then talked some more; then they drank and drank some more. This is a hard liquor region of China (just look at all those bronze wine vessels from Chinese tombs in the Smithsonian). My ancestors had a world technological lead in distilling alcohol.

In the end, they became partners and controlled that area for years and years. They were only brought back into legality by the fact that the emperor got caught in a ravine in some local battle and sent out passenger pigeons saying, "Whoever comes to my aid gets instant pardon and control of your land." They joined the mob that rescued the emperor and that was it. That is my father's family backdrop.

The family village according to my parents, is just a little south of Shanghai Guan -- Gateway of Invasions in the Great Wall. They were sent there when the Great Wall was built. It was basically a military settlement with the idea that soldiers there with their families would forever after defend China against the barbarian hordes on the other side of the gate. People did forget however, the Great Wall was not just a barrier. It was a customs control method. You were able to staff a much larger area across extremely mountainous terrain with a smaller number of troops manning watch towers. Then you could collect tariffs. People had to have passports. There is nothing like a literate bureaucracy. Eventually, people intermarried across the wall, and within a few generations my father's region of China was no longer rice-eating. They ate something called a manto or steamed bread. You probably can find it downtown at Tony's Mongolian Barbecue. It looks like sort of a donut except the hole isn't complete. The whole region developed its own ethics.

My father's family was basically agricultural. They owned their land. In the north of China women were considered very valued as the hard life meant men outnumbered

women, so a man had to pay a bride price -- usually land. So I grew up with all of the family legends including role models of strong, independent women. My favorite was a member of Dad's family who was sent for an arranged marriage to a man in the south of China to seal a partnership. She journeyed there with her maids who were also her bodyguards - my guess they were impressive lasses as Northern Chinese are larger than Southern Chinese (for example, my baby brother is 6'4" and 200 pounds and what I lack in height, I make up for in a solid build). Anyway, she arrived to find that she was not to be wife number one but a tertiary wife. Instead of either accepting it; or committing suicide in protest, she and her maids beat up everyone in sight and marched back north with every item of value that they could carry. She went on to marry successfully in her own region -- where no one would dare "dis" her by offering her an inferior position.

Q: Would you say, was this [size difference] because this maybe because of the Mongolian stock?

JONES: Oh I doubt it. There were people born with brown hair rather than black Chinese hair. You had to be generally pretty physically strong to survive. From what my father said of his uncles, he was the runt of the family at 5'8 and 180 pounds of solid muscle. They also used their fists a lot. He grew up basically in Manchuria in Harbin when his father, my grandfather brought him into the city for an education. His father was the village success. The village paid for his father's education and he ceded all his inheritance to the rest of the family. His father eventually became one of the judges in what the Chinese call the Northwest territory which included Manchuria and headquartered in Harbin, the territorial capital.

Q: Was this during any of the, was the Queen dowager the ruler at the time?

JONES: Just a little after. China was already a republic. My parents always considered themselves great followers of Sun Yat-sen but had no particular love for either Chiang Kai-shek (President of China at the time) or his Kuo Min Tang (i.e., Nation People's). In fact, my father had a bilingual education as he was groomed from the start for a diplomatic career (this meant both junior and high school and university study in both Russian and Chinese). His deal with his father was to finish this education, at which point his father would pay for his engineering training in Japan -- but the Japanese invasion of Manchuria ended that alternative.

Q: Where did he get educated?

JONES: At Beijing University, my father got his degree bilingually in both Russian and Chinese. He could do a legal brief in Russian and since the Russian was taught by émigrés, his grammar was often superior to the Russian spoke and written in the Soviet Union. He spent a fair amount of time in the Soviet Union correcting the Russians' Russian.

Q: Did you ever find out why he was trained in Russian?

JONES: That was the focus for the very far north of China, just as learning English was the focus for Chinese in Canton and Shanghai. Those were the people they dealt with much more, people they saw. I was not surprised when the Chinese and the Russians had a falling out since the only group of Chinese that actually knew Russia and spoke Russian well, never got along with them well anyway. Harbin was melting pot in which Russian speaking and Chinese speaking and Japanese speaking street gangs lived to beat on each other.

Dad was pretty much assigned to diplomatic service. When Manchuria was taken, and right after he graduated from college [1936-7?], he was invited to serve in the Chinese Air Force to help Russian pilots train the Chinese. This was well before Flying Tigers were active. They flew post WWI or WWI crates. My father wanted to be a pilot. If he had succeeded, I wouldn't be here because only two people survived in the original training class. He and his best friend both survived because they had washed out due to high blood pressure which knocked them out during dives. Both did their tours as interpreters. They went from airfield to airfield in China.

We were told those stories like the Japanese bombing one of their airfields in the middle of the night. The whole group of them managed to leap out of their quarters, run across the airfield, vault over a wall for safety, but afterwards none of them could crawl back over the wall, and it took two men to get my father back over the wall.

Q: Well how did your father move from air force into the diplomatic service?

JONES: There were very few educated Chinese, so when they needed him in the Ministry of Foreign Affairs, he was told to join the diplomatic service. It was a very small service, especially the Russian speakers, who all knew each other. I think the Chinese Ambassador to Moscow had been a professor of my father's at Beijing University. In late 1939 he was assigned to the Soviet Union. In the Chinese Foreign Service, you had to pay your family's travel expenses. He and my mother had married by that time. He was 25 and she was 20.

Her father was basically the equivalent of the Assistant Secretary for Russian affairs. But that had nothing to do with the marriage. In fact, while they were still in Peking (Beijing) both families had tried to arrange a marriage between them because the fathers knew each other; and both my mother had screamed, "No! Over their dead bodies." They were modern Chinese.

But as China lost more and more territory, the government moved to Chungking. My mother had to escape with her mother to the wartime capital, Chungking. There she met him at a reception. She was a beautiful young woman and had no shortage of suitors and used to admiration. When they met, instead of flowery compliments, his only statement was "Don't tell me you are Fatso's daughter." Her father was the legendary fattest member of the Chinese Ministry of Foreign Affairs. He easily weighed in at 300 pounds and could only fly in American planes because he had to be able to get through the door.

Q: From your family and all, at this particular point, where was sort of their allegiance? Were they ardent Kuomintang supporters? How did this work?

JONES: They did not support Kuomintang. Basically Kuomintang was the bulwark for people from Chiang Kai-shek's regime of China. Being a northerner my father was definitely out of it. Politically I would say they were original supporters of Sun Yat-sen, which was a slightly different focus and party. My father got in the Kuomintang bad when he refused their intelligence service's request to report on his colleagues. They did not think Chiang Kai-shek was personally corrupt, but he was surrounded by deeply corrupt officials and staff. At the same time years in the Soviet Union and seeing Stalin's rule made them fervent opponents to communism.

Q: Nothing like exposure to Stalinist Russia.

JONES: The Chinese Foreign Service tour was ten years -- with rotations among the consulates. All I remember was my father had also served at Habarovsk. Of course he started in Moscow, went to Habarovsk because we have photos of me as a scrawny little 1 ½ year old. He arrived in Tashkent in 1944 (?) and stayed until 1949 when we were declared persona non grata by the Soviets after Chinese government fell in 1949. The first place he could get out was through Finland. From Helsinki you could to Sweden. Once we were in Sweden they were at a loss-the Chinese Embassy in Sweden had also been abandoned by the government. There was no government left and no contact from the Ministry of Foreign Affairs. They and the other Chinese diplomats who made it out of the Soviet Union at the same time were embittered by this. Their attitude was that a government that had abandoned them did not deserve any loyalty.

Q: I want to come back, do you recall your father's experience through tales you were getting or something. All during this time people from The Republic of China Chiang Kai-shek's regime, the Soviets were supporting the communist party of China including Mao and others sending agents there. How as this playing with the Chinese diplomats watching their host country trying to subvert their own country?

JONES: Chinese diplomats followed old and ancient traditions. From well before the time of the Warring States which preceded the Qin Emperor, envoys did their duties for their rulers as best as they could. The Art of War by Sun Tzu also stressed the importance of intelligence and all diplomats were responsible for getting all the information they could and reporting honestly. I remember my father would go out into the hills, and talk to the various groups. Remember he was not only Russian speaking, he looked exactly like the locals and the locals liked him - at least they liked him better than the "white Russians" who represented Stalin's repression.

Q: This was in Tashkent.

JONES: Yes, Tashkent. They had very close relations to the different groups We still have photographs of my father wearing ceremonial Cossack bandoleer, and as a little kid I remember going with my father to different places. He often complained that he sent in

endless reports of Soviet help to Chinese Communist across the Sino-Soviet border and they were all ignored. Stalin did not control Kazakhstan except in the cities and the commissars. For years commissars met with unfortunate accidents if they did things the locals didn't like. It was a very Moslem society. The women wore chadors. It was very dangerous to be a policeman because thieves would disguise themselves with chadors as women. If you stopped a thief and you caught a man in a chador, you were a hero. If you were wrong, they cut your throat. I remember being with my mother when she personally caught a pickpocket. The wolf-dog turned out to be very effective in keeping theft down.

Q: Did you learn to speak Tajik?

JONES: I spoke Russian. By age seven I had learned to read and write and speak Russian. My parents tried to teach me the Chinese and I still speak it but forgot the ideographs as soon as I had memorized them. When we came to the U.S., the focus was on learning English.

Q: *Did you go to school while you were there?*

JONES: No. The Soviets started school very late, age eight for kindergarten. I could have been put into a pre-school but my parents and the Chinese at the consulate had no desire to raise a group of little world communists. So, they hired tutors who usually had been tutors under the Czar. I just remember a very strict woman who had a hard hand with a yardstick if you didn't pay attention. But she taught us the basics.

We were a very small community - definitely not an American style consulate. This is one where the offices and living quarters were pretty much one. The office was on the other side of the bedroom wall. There were no indoor toilet facilities and no running water. Winter or not, you either had your chamber pot or you galloped out to the outhouse in the yard.

It was an earthquake area, and there was one really severe earthquake that I remember. We were all saved by the huge old fashioned brass bed. Everyone got under the bed, and then the ceiling came down. Almost 10,000 people died in nearby town (Almaty?). As diplomats, we were allotted about 500 grams of meat for a family of 4 each month, so to supplement our diet, the consulate turned to a sideline - raising chickens. The kids had a chance to watch all the hens and the two roosters who gave us a cockfight a day - one rooster was too stupid not to challenge, and the other rooster was just strong enough to win the match but not destroy the opponent. We got rice from China, but as a result of corruption along the way, the 100 pounds of rice would arrive with 70 pounds of rice in it and 30 pounds of everything else. So the wives' diplomatic tea consisted of pouring the rice out on a huge table and picking the stones from rice grains.

Q: Do you recall sort of your father and other members of the staff and the family sort of following events particularly after the end of WWII, but then the Chinese Civil War went, following events and the long and slow collapse of the Republic of China and wondering what is going to happen to us.

JONES: I have some scattered memories or at least memories of what I was told. One time, Chiang Kai-shek's son visited, the Consulate General - which resulted in the death of a couple of extra chickens.

None of the quarters had kitchens. The kitchen was in the center of the courtyard and a Chinese cook did all the food preparation. He was invaluable, as was evident when he was hit by a car and couldn't work for a couple of months. The wives had to put their hands to cooking. This is using the old fashioned wood fired stove, where your little stove lid weighed about 10 pounds. Indeed I will say that massive indigestion occurred, as all these women who had never cooked in their lives tried different things. I still remember a lady trying to make dim sum (gyoza) where you have to make the dough - to be rolled into little wrappers for the dim sum. In her case she added a little water. It was too watery so she added more flour. Then it was too dry so she added more water. Eventually it took three strong men to roll a hunk of batter that was the size of a human torso. The Collective Farm system meant that there was never any food in the stores. The markets had food grown on the little private plots but were really expensive. The official exchange rate had no relationship to the "real" exchange rate. If it were not for the rubles that the Chinese locals exchanged for U.S. dollars, we would have never been able to afford the bazaar prices.

I just remember some childhood events. It was not a terribly healthy place. At one point they found that there was an infestation of lice of every conceivable sort, body, hair. The Chinese solution was to shave everyone's head, boy or girl, and DDT everything - the rooms, the house, the bedding, the people. We still have a picture of me as a very short haired kid.

Local hygiene was tricky because a lot of the women believed in washing their hair with buttermilk - glossy hair but enough to gag one downwind. In order to avoid diplomatic incident from ordering Consulate employees to change these habits, they offered the maids free perms. They bribed one of the former pre-communist regime hairdressers (a few pounds of sugar did the trick) and he cut their hair, washed it, and permed it. In order to keep their lovely new hairdo's they had to wash often and no buttermilk. My child's eve view of Chinese diplomatic life was very different.

Q: Well did you have little Kazakh kids to play with you?

JONES: No, we played with each other. I still remember losing a fight and coming crying to my parents. May father's comment was, "You have teeth don't you?" So the next time he picked on me I bit him and after that we got along.

Q: Well then you were moved and sent off to Finland and then off to Sweden. Was this again for a kid it must have been pretty traumatic wasn't it?

JONES: No, it's not traumatic if you are with your parents and they say OK, it is time to go. Remember, my standard of living was improved going to Sweden. I remember being

curious about going back to China. China didn't exist for me. I was born in the Soviet Union. My baby brother was born in Tashkent. In fact he was named after the doctor that told my mother that given her peritonitis, she would never be able to have children. His name was Nicolai, Ivanovich Chin. It is now Nicholas Chin.

I just remember a very long train ride plus having all of your clothes tied at the ankles and wrists - keeps the train bedbugs off of you. We ended up at a plane. I remember the plane to Helsinki because it had no heat. It was a converted WWII military plane. I remember a group of Russians dressed in heavy fur coats building a little fire on the plane so that they could keep themselves warm. Then of course, in Helsinki we went on a Swedish plane. As the Chinese government had paid my father was paid in U.S. dollars and he had an account in Switzerland for his savings -- we had survival funds. The Government took care of everything as the Soviet infrastructure was both unusable and untrustworthy.

Q: When you say the government it was...

JONES: The Chinese government. It was owned by the Chinese government. The whole consulate set of buildings and yard. This is a more Middle Eastern looking structure. All I remember is the extremely high wall surrounding the inner courtyard. Once, we even met an American diplomat who was traveling through. My father actually still remembers his name. The only common language they had was Russian. He had just barely enough Russian to communicate with the Chinese. They don't remember anything about him except that he was a jolly sort. He also borrowed some money from the Consul General. I don't think he ever repaid it. So that was it.

Q: So what happened you were in Sweden for awhile?

JONES: We waited almost a year for news, for permission or for orders. Finally, we were transit visas to the U.S. If things didn't work out, my parents planned to try to reach Hong Kong; but on the trip over, the Korean War started and Taiwan was still incommunicado and a mess, so New York City, it was. We left from Oslo on a freighter called the Mormarcrio (10,000 tons). I still remember that trip because my brother got into the toilet paper and we had toilet paper streamers all over the ship.

Q: Well then where did you go in the United States? This would have been....

JONES: 1950. We arrived on 4th of July weekend basically. We had friends, the Consul General at Tashkent had already come to the U.S. He had cashed in all of his family wealth, and signed some sort of a deal for an apartment. Everyone thought that he was horribly taken advantage of because he paid \$30,000 for a 99 year lease on this apartment in Riverside Drive, which had I think 4 bedrooms, three bathrooms, servant's quarters, the works. Then later they forced him to buy it for another \$10,000. However he managed to find someplace to stay while my father ran around trying to figure out what to do.

Q: Well there was the...

JONES: He couldn't go back to China.

Q: But Taiwan was, you know there were diplomatic relations with the Americans.

JONES: Yes, except there was no place for anyone, and at the time by then they had started shooting people in mainland China. People in my father's family were executed by people's courts because they had owned a few acres of land.. My father was very lucky that he was declared Persona non grata ejected from the Soviet Union. Some of his colleagues never made it out and were never heard of again. I still have a copy of a picture - which includes one of "a communist spy" in their midst. She was, by the way, the only woman with a figure and nicely dressed, and later married a very high level Communist official, and even became a Minister. The ones that came to the United States had all lost family members. The person who I remember as Mr. Hu - the communicator or telegraph operator. His father and brother had been shot in China. A Mr. Liu also came to N.Y. - also a Russian speaking Chinese.

My parents had to learn the English. My mother worked in a Jewelry factory in New York while my father scouted out possibilities. It was a factory where she glued fake pearls to earring backs. Eventually my father got a driver's license and bought a black 1950 Plymouth which was absolutely the ugliest car I have ever seen. My father learned to pilot it in eight hours of lessons, drove to New Jersey and bought a chicken farm in Dorothy, New Jersey. So we moved there. We were like aliens from outer space, with no fellow Asians in the area but fortunately, there was a community of orthodox Russian speaking Jews there who helped us settle.

O: How about you. When did you move to New Jersey?

JONES: In 1950 we arrived. It was July. My birthday is November so I was 8 ½ when we arrived. We moved to New Jersey within a year, eight or nine months later after arriving in New York.

Q: Well during this year and a half while you are doing, you have not had any formal education.

JONES: I had tutoring in Russian while, in Russia. While we were in Sweden my mother continued teaching us in Chinese, and teaching us mathematics. In New York they took me to the public school which was just across Broadway. That is the only thing I remember of it. My mother asked, should she be put in first grade? They said, "Well she is too old." So they put me in third grade. I learned English in about three months. After about three months I was put into fourth grade. I still remember the school was in such bad shape you went up and down the fire escapes after classes because the hallways weren't always passable. I remember very nice teachers and ended up with a serious New York accent as a result. The kinds were a mixed group. Chinese kids get a lot more math at any age, so I never had a problem with the math. Learning English was fairly difficult,

and I got into a fair number of fights because the Chinese upbringing I had was not the pacifist peaceful southern type. It was the northern, make yourself heard with a baseball bat if you have to.

But once we were in Dorothy, New Jersey, we went to the local middle school and to the local junior high. My father farmed, had the chicken farm for several years. Remember the Korean War had started. My parents came from the generation that expected World War III any time - especially since they knew what the Soviets were like and how aggressive the Soviets were. That was why they had left Sweden. It was just too close to the Soviet Union. Plus my mother didn't want us to become little Swedes. Nothing against the Swedish but she was bothered by the fact she would see Swedish drunks, and they were very different from the Russian Drunks my parents had seen.

They had seen lots of them in diplomatic entertaining. In fact I forgot to mention that as a kid I remember seeing them set the table for the diplomatic entertaining. No women involved. They had a bottle at each place setting for the entertaining. As the evening went on as my father described it, they would toast the friendship between the countries. They would toast this; they would toast that. Eventually they would get to Stalin's body parts. By then half of them were under the table. The kids always ran around looking for Mr. Hu to be carried out first. Because I think Mr. Hu weighed about 115 pounds. My father, however, and the consul, being northern Chinese had been weaned on this Chinese moonshine - called Kaoliang wine (80 proof) The only time I tasted it I thought it was kerosene. My mother looked around and saw these incredibly depressed Swedes drinking by themselves in bars and concluded that "This is a psychotic society."

Q: Ok you are now in New Jersey. How long, from when to when were you in New Jersey?

JONES: We got there I am sure in '52. Actually we stayed in New Jersey, though we moved from Dorothy to Buena Vista and then to Vineland in 56, In 59, I finished high school. I got a scholarship for a chemistry degree at the University of Pennsylvania and went on from there. I had chosen what they call an "iron rice bowl" career -- nothing so soft as mere international relations and hopefully war and recession proof.

Q: OK, we will go to '52 then. When you start it is '52 to '59.

JONES: My father's brains were not affected by his lack of English and he could spot economic trends. As soon as I could read the Wall Street Journal I would help translate it. He began investing then in the early 50's. He saw that after the Korean War, the farms were going to have trouble and sold the farm, then, he and my mother both worked at Kimball Glass - making laboratory glassware. First he worked four shifts, then it was three shifts. My mother did two shifts until finally she joined the packing department. She continued working there until I was almost finished college. Then when she thought she had acquired enough English to go back to school, she did and got a nursing degree.

Q: Let's talk about school early on. You say there was an orthodox Jewish community in the area. How was school? Were they orthodox in the school?

JONES: It was, except this is the country. The post office, the mayor, the gas station, the only grocery were one building.

Q: Now what was the name of the place?

JONES: Dorothy, New Jersey. Now it is a bit larger. The farms average ten to fifteen acres.

Q: Is this the famous truck gardens area?

JONES: No, chickens. Lots and lots of chickens, and corn for the chickens. The school was about a mile walk from our house. The school house was so small that two grades would share a room. I think it stopped at fourth grade because for fifth and sixth grade I went to Belcoville and was bussed there. For junior high because I attended J.P. Cleary junior high in Buena Vista. There, one teacher made all the difference. I was still a slow reader in English A teacher called Orlando Canale was learning how to teach speed reading and noticed I was moving my lips when I read. So he took it upon himself to teach me speed reading as he studied it himself. At the end of a school year of extra lessons, I had achieved my average was about 600-700 words a minute with about 90% comprehension. That made all the difference.

Q: Well this was in high school?

JONES: Not yet. I was in seventh grade.

Q: Well let's go back even before. How did you find the teaching and the students in this small town with two classes in a room?

JONES: Quite sufficient. Basically first I am Chinese, and Chinese kids are taught to be very respectful of teachers because education was your only hope. This is an attitude set from a millennia of history and an educated bureaucracy and based on that great Chinese examination system. The teachers were good and I absorbed the material. My parents kept wondering why there wasn't any homework, because there wasn't. I didn't even notice math was really anything until I got Algebra and then it was kind of fun.

Q: How about the student body?

JONES: Kids, farm kids. I remember one family that was very poor. Not a single one of them had clothes that would fit, and people would regularly donate clothes to them.

END OF SIDE 1

There was a Russian émigré family - the Valentines. The son and daughter were very nice kids and taught me to play musical chairs.

Q: Well did you find that being Chinese, was it that different, I mean was it such a mix that the kids didn't focus on this at all?

JONES: They didn't much. I will say that in high school it made somewhat more difference. In junior high there were a couple of kids that decided to pick on me, and there was some nasty stuff written on blackboards. I thought it wasn't worth it to bother my parents. I figured out the ringleader was one of these girls and despite my small size I slammed her into a locker and said that it wasn't going to be fun to pick on me because if I died doing it I was going to fight back. After that they found other prey. Unfortunately one of the kids they found to pick on was a Jewish kid called Richard Yanowitz. Now I was small but he was even smaller than I was. A skinny and freckled kid who was very bright. After they found out it wasn't any fun picking on me because it was more or less like picking on a Rottweiler, they did horrible things to him. Years later I think he still had the scars. Even though he went on to university he washed out. I had heard that later he had all sorts of problems.

Sometimes, it's easier knowing you are indeed different. My parents told us, "You are different. You are a different race. You are a different culture. You are going to start all over again." My father said his career problems are not his fault, and that was his comfort. The only thing we had was intelligence. You would always be welcome when you specialized in areas, such as medicine, science and engineering, where they needed your skills. Knowing that I was different made it easier to adapt and to keep what I wanted of my own culture. I did have a bit of luck as I followed a family pattern of maturing very slowly and very late and very very gradually. As a result in high school, I was not bothered by the hormonal storms that were wiping out my classmates. A good half of them had to get married after high school. It made it easier to concentrate on whatever I wanted to. Slow maturation made it very much easier to focus on physics problems.

Q: *In the first place, did you grow up with a religion?*

JONES: Not really. My parents were basically agnostic Confucians. That means that they believed that there probably was a God, but they figured that as the God created everything, he was above all these little squabbles. Chinese don't have a history normally of killing each other for religion. It was normally to kill for land, wealth, revenge or domination. They were familiar with Buddhism, which they explained to me, but which my father and mother felt was too negative a religion. To them, Buddhism was a way to explain the inequities and injustices of life, and to convince you to take it until the next time around. They had great respect for Christianity based on what they saw in China. They described parts of China so poor that literally they didn't even have dogs. Even there, the Catholics had set up orphanages.

The Chinese had more problems with Protestants, because my parents had been raised in a culture of celibate clergy. The idea is if you devote your life to something, then devote your life to something. They could not see how someone who had family responsibilities could actually give to God what was necessary and still care for the family. Remember, Chinese family obligations were very strong and demanding. So if you were a minister and had a son, they couldn't see how you couldn't favor your own son because that is what you were supposed to do. Therefore, it made any lectures somehow a little difficulty. There was a certain humor too.

My mother's family according to my mother had a rotating altar at the entryway depending on the religion of the guest. - just to be polite. This is the same spirit that leads you to Hong Kong weddings with six religions officiating. They never got the various denominations straight. It took them years to get Jews and Christians straight.

In one anecdote, a Methodist bishop was giving a talk in quite good Chinese - in fact even deceptively good. Every once in awhile he would slip up, but the Chinese thought his tones were awfully good. He was a hell and damnation type of preacher and said, "And Christ will march to victory at the head of the banners of heaven." Manchu military units followed banners (similar to the Roman Eagles). Well the Chinese term for concubines is Tzidze (high tone) and the Chinese term for banners was Tzidze (low tone), so what the Chinese heard was Christ will march to victory at the head of the concubines of heaven. So they asked, "We didn't know you were that liberal. How many?" And he said, "Thousands." Well he may have made converts but it sure confused a whole lot of Chinese.

We had a very strong Confucian ethical background. Confucius had the view that if you are a human being you act like you have certain duties, responsibilities. Honor is very important. Honesty is very important. My mother transmitted Chinese culture to me with the usual tales. In fact that I have written a book, "Tales of the Monkey King" based on the stories she told my brother and me and our children.

Judaism they understood as a contract between God and the tribes. So whatever the contract required, that was fine with them. They were neither pro nor anti Semitic and likes or disliked people pretty much on what they were like rather than the group to which they belonged. They had a vague understanding of Christianity. As for, Catholics, they understood the structure of the religion but thought the Pope was nuts on birth control. Both my brother and I went to a local Methodist Sunday school, because our mother wanted us to learn a little more about Christianity in the culture. We got a little ticket for attendance and if you got enough tickets you got a free bible. My brother won all the tickets available in some incredible game of marbles and still has that bible.

I believed that a good person would do good deeds and their duty - not because of heaven or hell - but because that was human.

O: So there weren't family gods or like this around?

JONES: Oh no, my parents were rebels of their generation. They thought that China had been held back severely by its attitudes. The good news was that the Opium War took place and the Boxer Rebellion took place as a wake up call. They were very much for modernization. My father was strong on women being able to take care of themselves. My mother was certainly able to take care of herself. After all, at the age of 16, she was able to make it form Beijing to Chungking with her mother in something like a 2,500 mile river boat trip. She was not the pampered darling of the family. Although her father did well. He took a Russian wife and tried to abandon his Chinese wife and child, except that her grandmother, his mother refused to let him. He gave them an allowance which according to my mother was approximately what fed the family dog-- a pampered pet.

All I can say that my family had scholars on both sides so that my brother and I inherited great test taking genes -- which we passed onto our children. Along with that, we probably lost all entrepreneurial and money making genes.

Q: Were you getting through the family and all, a feeling that, I don't know how to put this because I don't mean it in a pejorative sense, but that the Chinese were almost a chosen race, not a master race, that is a bad term, but in other words a superior. Was there something Chinese were better or not. Were you picking up any of that?

JONES: It was an odd mixture. No. we were not taught Chinese were racially superior or inferior because basically that isn't something for which we could take credit. We are born what we are born. An evil person did evil (regardless of ethnic background) -- a good person did good deeds. My parents were very strong on what you achieve. They thought the Chinese patterns of behavior were civilized and like other Chinese of their class they willing to accept anyone as equal or superior to Chinese depending on their behavior.

This is historical. There was a person called Mateo Ricci who was a Jesuit missionary sent to convert the Chinese. He had such tremendous success that they had his Chinese name which was Li Mado and his actual writings are still in Chinese archives; he was accepted because he had turned into a Chinese Mandarin. This created a problem for the Pope who found the Jesuits were becoming more Chinese and less Jesuit. The next sect he sent were Dominicans, which is why the Chinese are not all Catholics. If they had kept it up with the Jesuits there was a chance.

There was respect for certain behavior patterns, for certain attitudes, a value for education. There was the recognition that life isn't that easy, so you have to use what assets you had. At the same time you had to make an ethical choice. Things like the <u>Art of War</u> (by Sun Tzu) are taught as children's stories.

For examples, good manners are taught with the tale of a ferocious war leader who was assassinated by his tailor, because lost his temper, yelled at and terrified his tailor so much that the tailor stabbed him. Their ideas were well in line with the biblical admonition to be gentle as doves and as wise as serpents. Of course, as for stories of diplomatic derring-do, all through Chinese history there are thousands of examples of

people who were able to save themselves and others by using their intelligence and understanding of the human mind.

My favorite is an instance when, long, long, ago, an emperor told the Magistrate to stop human sacrifice in an area of China where the rivers flooded every year. And every year the locals would get young men and women, bedeck them in jewels, and toss them in; but the emperor didn't to use force to change their ways as he had no troops to send. The Magistrate's solution was very elegant. He went to the villages and said, "Have you been doing this a long time?" They answered "As far as man can remember or for centuries." Then, He said, "Do the rivers flood?" "Oh yes, the rivers have flooded every year." He said, "Well you are obviously sending the wrong kind of men and women. How do you know what the river god likes? Did he ever come out and tell you?" "No." He said, "Well send the priests." He had all the priests tossed in. At about the halfway point the priests stopped taking the jewels. That was an elegant solution to save many with the loss of very few.

Q: Did any literature, I use the term very broadly. Any genre or books particularly strike you as a young girl?

JONES: We had the standard texts: "Ivanhoe," "Tale of Two Cities," and much Shakespeare. I think we had "Romeo and Juliet," "Julius Caesar," "Hamlet," and "Macbeth." I vaguely remember thinking Romeo and Juliet were idiots. You have to remember, I was headed for science. I liked the other plays. I liked Dickens, and actually read several Dickens books. Then, I hit the Pickwick Papers and decided this was written for people from outer space, not me. At age 15, I discovered Agatha Christie, Robert Heinlein (Science Fiction) and Scientific American. I was a library hound.

O: Did you have a Carnegie Library?

JONES: Yes in Vineland, New Jersey, not more than a mile and a half from our house, so I could walk to it. We always took out the maximum limit of books, but I read a lot of science books also.

Q: Any particular things in science that interested you? I am talking about as a young kid.

JONES: I started with astronomy. Kids often start with astronomy. I liked biology, and I placed eighth in a new Jersey contest on it ages ago. I enjoyed it, I wanted something where I could think originally. Physics I enjoyed, but didn't have an instinct for it. Chemistry seemed to me the perfect science. It had enough theory. It had enough mathematics and logic and order, and enough strange stuff. It was also extremely practical with direct industrial and manufacturing applications. As I had said earlier, I was a descendant of test takers, and my college boards results showed that that mathematics and science were my strong suits. I was good in English, but I never felt any interest in continuing in it - not enough of an "Iron rice bowl."

Q: You might explain for someone reading this, what you mean by that iron rice bowl.

JONES: OK, in China your way of making a living is called your rice bowl. It is how you feed yourself. If you can only make your living by let's say sheer labor and have no special skills then you have a clay rice bowl - easily shattered. In a society which has a long history of wars, revolutions, natural disasters. An iron rice bowl is one where you carry your skills with you. The skills could medicine, science, engineering, i.e., anything in demand and hard to master and so making for a harder to shatter "rice bowl." The term is similar to the Chinese have a term for strong minded females - "steel butterflies."

Q: Well I often use the term and somebody comes in and somebody proposes something, you have got to be careful you are not breaking too many rice bowls. You are upsetting the order of things, and you better have something effective. This is complete and I am coming back. I was just wondering your parents when they got into American society and all, early on, did they have any political party favorites or not?

JONES: Oh yes. They are lifelong Republicans because they felt they owed Richard Nixon for the opening to China. Until Nixon resumed contacts with China, it was illegal for Chinese to send money to their relatives. My mother still had a mother in China who certainly would have starved to death. The only thing she could do was to contact Chinese in New York City who were friends of friends. They had relatives who did business in Hong Kong and so had renminbi (Red Chinese yuan) bank accounts. She would hand U.S. dollars to them for the relatives and ask for their help to keep an elderly woman from starving to death -- and so earn merit in heaven. She never asked what commission they took, if any, but she kept her mother alive. She had letters from her mother saying that they were all right for that month. It was not just her mother as her mother had adopted another relative's abandoned daughter and was raising her.

My parents also felt very strongly that the U.S. was not as wise as it should be in dealing with China. China could be a counterweight to the Soviet Union. My father was probably as anti-communist as you could be.

When Nixon opened to China, they said, "This is a man who knows what he is doing." Also when they came to the U.S. in 1950, the most anti-immigrant, anti-Chinese people were the Democrats. People have forgotten that as Democrats are very liberal today. Then, they were the ones who spoke of the yellow terror. In 1950, people in the NYC subway would catcall my father as they saw no difference between the different kinds of Asians.

When I was a Senior in High School, I was interviewed for the University of by a local Irish-American business man, who told me that when he was a kid, he and his friends used to chase after a Chinese laundry man calling him names. Now he saw it as proof of how stupid children can be. I also think that he compensated by giving me a rave review which got me a scholarship for Penn.

I also learned that if you brood on your wrongs or on your slights, there is no way to move ahead. My parents basically taught us that if someone call you a chink- get over it, the best comeback is success. Perspective is important. Chinese had quite enough bias against other Chinese or Blacks against Blacks or Welsh against Welsh. In Vineland, New Jersey, you had Puerto Rican farm hands who, while legal and U.S. citizens, were still exploited by the local chicken farmers. You had families of blacks. You had poor whites. History has enough examples -- think of the Protestant-Catholic conflicts.

Vineland was an Italian American town. The local lore is that in the 1900's the Poles and the Italians had it out in Junior Police field and the Italians won Vineland, and the Poles won Millville - leading to an eternal football rivalry between the high schools. At the school I had wonderful teachers. I had friends. In fact, some of my friends (a pair of Polish-German American twins girls) felt more left out than I did. I knew I was different, so I expect to be "in" the local social and dating circles but they really felt ostracized. Remember I didn't date. I wasn't interested in dating and my parents really wanted me to concentrate on my studies.

Q: Well what about with chemistry? Coming out of sort of rural New Jersey I wouldn't think you would get the best chemical training.

JONES: The U.S. education system was wonderful as the great equalizer. The high school was run by a woman named Miss Rossi, who was the principal. She had dedicated her life to Vineland High School, which had about 400 students and about 35 college prep. She made sure that the chemistry teachers, the physics teachers, the math teachers had masters degrees in their field. She wasn't going to take second place. We entered every state contest there was. I think I placed in every field, chemistry, biology, and physics. The teachers often used college textbooks to strengthen our background. So when I got to the University of Pennsylvania, it was no problem at all.

O: You were at the University of Pennsylvania from 1959.

JONES: 1959-1963 for undergraduate, but when I was in undergraduate I took a year of graduate work.

Q: Well let's take the University of Pennsylvania now. When you got there in 1959 what was it like, I mean how did you see it?

JONES: It was a very good environment especially for a woman because I was in the women's dorms. The college for women was separate from the college for men - not for classes but administratively. We were told that we had higher SAT's than the College for Men. The other women were not there to get their MRS. It was also very international. We had a couple of Hong Kong students who were really amazing. We had a layer of old Philadelphia, but I was there after Grace Kelly and her sisters had been students.

Q: They [the Kelly's] came from mainline. Well they weren't really mainline; they were Irish upstarts.

JONES: True, Kelly Construction parking garages at least didn't collapse. I found friends. I never joined a sorority because I was never interested. You have to remember the BS chemistry program was so rigid, I could have graduated after 2 ½ years if you just counted courses. We had a lot of lab work. Of course I had close friends in the Chemistry group. We started with five women and 95 men. We graduated five women and ten men. I met Dave right at the start. He was a buddy first.

Q: He is your husband. I am just saying so that if somebody wants to read. David, what is the middle initial?

JONES: T. David Taylor Jones. Right after I met him he told me it was like Davey Jones' locker. I thought of him as David Locker for weeks. For Freshman year, I promised my parents to date only Chinese kids but it turned out however that I had turned into an American in the interim and was a bit too much of a chemist for the lads..

Q: Well you were there during the election in 1960 between Kennedy and Nixon. Did you get caught up in this at all?

JONES: Only to the extent that I stood on the sidewalk looking like everyone else when I think Nixon's motorcade went by. I may have been there when Kennedy's came by. The way people seemed to idolize Kennedy bothered me. I guess I had an ingrained suspicion of following any charismatic leader, especially of having family dynasties. China had 4000 years of bad family dynasties. I was also opposed to any hereditary aristocracy as were my parents. We were raised with that. There was old Chinese folk tale was the man who was the son of a shoemaker who became a duke. People made fun of his very humble origins. He said, "Look, which is better? To be a duke who is the son of a shoemaker or the other way around?"

Q: Well did you concentrate in the field of chemistry?

JONES: Yes. I selected a graduate advisor, who was the youngest professor - a man called Ed Thornton - who specialized in physical organic chemistry - a new field, which applied physical chemistry thinking methods to organic problems. I liked organic and I liked physical chemistry and this way I didn't have to choose.

Q: Were you pointed towards anything?

JONES: Not really except for the bias in favor of an iron rice bowl. The idea was that you do best what you do best at. My parents had just one rule, because you have no idea what your kids are going to be good at. So they came up with the idea that whatever it is, just do your best at it, even if it is going to be the best hairdresser in Vineland. They also recognized though that Vineland was a small town where being related to someone made a big difference. It was probably easier in fact to get a degree in neurosurgery than to get into the Plumbers Union -- unless you had an uncle in the union. So they felt that we had to leave Vineland, the children to succeed. The University was wonderful. I had a full

scholarship plus I had a scholarship from the high school, so it think my parents were out of pocket \$300 a year for my university education.

Q: Well in high school and in university, did you have summer jobs or evening jobs or anything like that?

JONES: I did. The first summer before college, and the first year of college I worked at a local food flavoring firm in Vineland called Limpert Brothers. They had one chemist who needed an assistant. He was a huge humungous Swede, who probably could have lived until 110 except that he drank -- the result of having married the hardest heart and the prettiest ankles in New York City. We did flavoring research, which gave him an excuse to order a lot of absolute ethanol for use as a solvent. He used some for experiments and some for his drink mixes. The only books he had around were Samuel Pepys Diaries. So as I watched different experiments I got a chance to read all about the plague in London

Later, I had other summer jobs. I had the standard lab tech jobs at American Cyanamid and Atlantic Refining. I did well and ended up first in the program at the end of four years. I also had a year of graduate school before I started graduate school. I also had a teaching fellowship at Penn, so it was easy to just continue there -- especially since David was still there and we were engaged.

I was so glad I chose Penn -- though I had scholarship offers from MIT (where I would be one of 17 females - cloistered in a special dorm. I turned down Barnard as they required zoology for a chemistry degree and I disagreed. Penn may not be the most glamorous of the Ivies but it retained some of the original Ben Franklin ethic there. It was much more relaxed about a lot of things. Penn and Columbia were among the first ivies to admit Chinese. So among the Chinese community they had a much higher reputation than Harvard or Princeton and Yale, because they had a reputation of fairness.

Q: Well did you, I mean as you were doing this and looking around, I mean irrespective of sort of the Chinese factor, what about the female factor as far as were you feeling that the cards were stacked against women particularly in the sciences and things like that?

JONES: No actually when I was a graduate student I was in a group with five women in a graduate research group of 12. All five of us got our Ph.D.'s within two years of each other. One day, we just sat around talking about being women PhD candidates in Chemistry. We were all very different personalities. One could have been a concert pianist; one could take your car apart and rebuild it; one could have been a fashion model and was a married fashionista with a child. What we had in common was the conviction that we would be good at chemistry. The nicest thing about science is that you could prove you belonged by being good at it. When you got 100 you got 100 - they couldn't take it away from you. We all passed our graduate prelim exams one after another and that was it. If guys wanted to complain about it - they could complain all they wanted but it didn't change our abilities. We quickly worked out a division of labor for the lab.

Keep in mind that American graduate students do their own glass work, their own welding, and their own soldering. It might be harder for the women to move nitrogen tanks, but we could do it with the right equipment. But if you have a colleague who was having a desperately hard time attaching glass joints to each other - we could trade. All the women seemed to do better than the men at the fine glass work. It was pre-women's lib movement and we were all less self conscious about feminism, self realization and whatnot. And if someone stepped out of line, it was up to the target, female or not, to make clear objections. Every once in awhile we had someone who did step out of line, there would be a ferocious reaction, the body parts would be reglued and life would continue. But science graduate students are not like humanities graduate students in one way. Basically humanities graduate students like Dave's fellow political science and international relations graduate students all competed against each other. For science, we had the problems to fight -- that was the thing that was going to keep us from getting our doctorates - so we helped each other much more. In the end we pretty much typed each other's dissertations - including helping with the English for foreign students. In one case, we each did one Chapter and so he ended with a dissertation of like eleven chapters written in eleven different styles.

Q: I am just not familiar because I don't run across many science people in higher science in doing these interviews because of the nature of the foreign service. What at a certain point what do you do your dissertation or your final thing in chemistry, what did you do?

JONES: The dissertation was on the Solvolysis mechanism of methyl chloral-methyl ether. In other words when something reacts with a solvent, it's easier to model it mathematically as the solvent molecules are overwhelmingly more numerous than the reactant - so you can count its concentration as a constant. Normally when you try to do a study of two things reacting you have to follow through time the changes in concentration and so on of two elements. By putting it into a solution, and using the solution as one of the reactants, you make it easier on yourself - a sort of kung fu of the mind. We had certain theories on how something happened, and in order to determine if the model was correct. I replaced the hydrogen atoms with the deuterium atoms. Because deuterium is twice the molecular weight of hydrogen, it means all the molecular vibrations are different, just as it would be if you had a violin string and put a weight on it. I had a National Institute of Health fellowship for my research, so I only had be an instructor one year. As an instructor, I had my first run-in with a different culture. I had a Turkish student who refused to admit he was being taught by a woman. So I was Mister Chin to him for the entire course. He also always wanted to negotiate the grades, but didn't like my policy of regrading an entire test not just one question.

I had another student who was a Black Panther - full afro, attitude and sandals. I got him out of the sandals by telling him did he really want to replace all of his toenails after they rotted off when the lye spilled on them? I finally had to take him to one side and said, "Look whatever my ancestors did, they didn't do it to your ancestors. Whatever your ancestors did, they didn't do it to mine. So I have nothing to do with all of this, and if everyone else in the world disappeared, I don't think you want to give up penicillin,

plastic, steel, alloys. The point is learning these skills. I don't care about the rest of it." Actually he turned out to be pretty good.

Q: Well then you got your Ph.D. when?

JONES: I got my Ph.D. in November of 1966. I had to get it a little bit earlier because I had a job lined up in the department of Agriculture. The government was a stickler for having the degree first. So they wouldn't hire me at the pre Ph.D. level and then wait a semester. I didn't bother going to the graduation in May because I had a set of experiments to finish.

Q: Did you mention the Black Panther. Did the winds of the civil rights movement and affect you. Was the chemistry department sheltered or out of the loop.

JONES: No. We had two African-American graduate student in our group, Al Smith and Malcolm Pope just on my floor. They were very different personalities. Malcolm Pope was difficult, pushy aggressive, a classical male chauvinist, and a fantastic chemist. He got total respect, no doubt about it. Because if he was right and you were wrong he would stuff it up your nose with a smile. Al was much more genial. He had been in the Air Force. He had much more people skills. He had more problems with the chemistry as he had been out of college a while.

The Penn system required you had to pass a cumulative exam in your field on anything in your field and to be accepted as a PhD candidate you had to pass 7 before you failed - plus the free ride you got for your first year. This meant that in addition to the graduate courses you took you read like a maniac in everything in your field. There was no assurance that you could get away with just knowing organic. You had to know heterocyclic; you had to know polymer chemistry. You had to know all sorts of physical chemistry. Al was close to not making it and filed a civil rights action. He had flunked six. So the seventh one was going to be the determining one. The particular professor who gave the next one shelved the issue by passing everyone - no names on the exams.

In the women's dorms we had one African-American girl who was a scholarship kid like me called Inez Qualles. She was warm, friendly, and a skillful seamstress -- so she made extra money with her tailoring skills. There would be a line ten people long before any kind of dance in front of her door. She became a teacher. There was another one, Muriel Garland, who was a short feisty very dark African American, one who had finished all of her chemical engineering requirements in three years. She was brilliant and was as smart as she was difficult. Her favorite ploy was to tell gross anatomy stories at the dorm dinner table where we ate family style. She then got the dessert servings of her nauseated table mates.

Muriel and I got along. I met her because she had a radio that played too loud, so I told her I couldn't stand it and she had better or I was going to smash her radio. She said, "You know, you talk to me like a person." I said, "Of course I talk to you like a person."

You are." She said she got so tired of people tiptoeing around her - being nice to the poor little black kid. She would rather be disliked for herself. Thus, we became friends.

Q: So on this I take it you came around out of the whole educational side with a very positive attitude.

JONES: Absolutely. Oh, we did have Vietnam War protesters. The head of the department was a Quaker, Charles Price - president of the American Chemical Association. He had worked at Oak Ridge National Labs on the atom bomb project. He was also a Quaker. But he said no one was going to have any peace being a Quaker if we lost WWII. He patented a lot of things, so he was quite a wealthy man and had a yacht which his graduate students enjoyed. At the time, the organic chemistry department was considering whether to accept an army project to develop better incapacitants, i.e., chemicals that allowed you avoid shooting people in tunnels as they would be so dizzy puking out their guts you could capture them. So in some ways it was considered humane. About 70 students decided to oppose this. Until the TV cameras showed up, they sat around and then, they went around in circles with big signs accusing the chemistry department of killing babies and so on. Marching in a circle allowed the cameras to fool the audience as to the actual number of protesters. Charles Price was so mad at the demonstrators he not only accepted that army project, he accepted six others.

But Penn was not an activist campus - it definitely was not like Berkley. The students were pretty wrapped up in their own affairs. We lost friends in the Vietnam War and I thought the treatment meted to the Nam Vets was shameful. I married on Dec. 12, 1964 - just a month before my husband was sent to Korea. He went right after his Masters Degree in International Relations. He had passed the Foreign Service Exam as a senior and was all set on his future career. We married very quickly with just a month of preparation, so that I would be covered by all the military spousal benefits before he went to Korea. I just continued my graduate work, no distractions.

Q: Then you graduated and got your Ph.D. and immediately went to work for the government.

JONES: Yes, for the Department of Agriculture in something called the pyrolysis lab, where they looked at the mechanisms behind what was produced in tobacco smoke. We tried to identify the specific mechanisms that produced the various carcinogens. Most people don't realize this, but you can get the same lung cancer if you smoked dried lettuce. It is not the tobacco plant. It is the smoke from burning plant material. You cold smoke wood chips. You could smoke rutabaga peels. The smoke included complex aromatic hydrocarbons called Benzopyrenes which were carcinogenic.

Science and science statistics can be mushy -- we are all bell curved. Some will be very susceptible to carcinogens and others aren't at all. Scientific training allows you to step aside from the problem, break it down in elements. That is its strength. A weakness is you take a problem and when you break it down into elements you simplify it. When you simplify it, automatically there are errors which are introduced. This is why - in all these

whoop-de-do over the global climate change, honest scientists sound like they are made of mush. They know there is much that they don't know. I felt sorry Rumsfeld was criticized for the statement about things you don't know, because indeed that is important. The science training I had gave me a very much a practical way of looking at problems and problem solving. Agriculture worked out very nicely. I worked for a man who was Orthodox Jewish, so he had all these restrictions once the days became shorter. He and I cut a deal. He could leave early on Fridays and I could leave early on Monday. So we were very happy; I had two technicians. I did what I could to train them. So it worked.

Q: You did this for how long?

JONES: I was at the Wyndmoor Agricultural Research Labs for two years. Once David entered the foreign service, I transferred to the Department of Agriculture lab in DC and worked in the Dairy Lab. That was basically analysis using gas chromatography to identify different flavor chemicals.

Q: Well I thought what we will do is end this session in a minute or two. We are getting into the foreign service, David gets into the foreign service, and we will pick it up there. But when you were working with the department of Agriculture on tobacco, were you feeling any pressure because this was the time everybody in WWI they used to call cigarettes coffin nails. No big surprise, but there had been this tremendous idea put forward by the tobacco industry and by the smokers trying to discount all this. Were you feeling any of the pressure on this?

JONES: No, because our research was totally different. I was developing new methods of using liquid chromatography, gas chromatography. Chromatography is basically something that depends on the fact that if you have a mix of different compounds, and you put a gas through them, or a liquid, the flow rate, the rate at which they will be carried into a medium, differs depending on the molecular weight and the characteristics of the compound, and the characteristics of the substrate. This is all back in the dark ages, no computer. The first computer work I did was for my dissertation where I had to learn machine language programming to do nonlinear statistical error analysis. We were not tobacco industry. We were not involved with tobacco farmers.

Q: That came out in '64.

JONES: The surgeon genera's report was very straight forward. What it said was if you smoke two packs a day, for so many years, you have roughly a one in eight chance of developing lung cancer which will kill you. But, if you were they type who smoked three cigarettes a day or five a week, then your body took care of it - unless you were very cancer prone. They have studies in which they rubbed tobacco tar on shaved rats. When they rubbed the tar on the skin tumors came out. Then some bright scientist decided to leave out the tar and just rub the rats, and the tumors came out. It turned out that it was a strain of rats that got tumors the minute you looked at them sideways. We had other studies in which it compared very heavy smoke inhalation by a whole group of rats, and

not a single one had died of lung cancer. Of course they died because they were asphyxiated by too much smoke. So you had a certain amount of cheating. But on the whole the science was very clear. The question was it was a question of personal choice. It had not gotten to the level here now. It still was that old adage, it depends on you. Not everyone who smokes gets lung cancer. Some of them we know get, they are more susceptible to certain diseases. Some of them get maybe some sort of emphysema, which is an awful way to go. Others seem to follow their cigarettes with whiskey and not say many words. That is the way humans are structured. There is a great deal that needs to be known. The thing that always struck me about the Foreign Service or any humanities is that the problems are much more complex than any I have ever encountered in science. Science allows you to break it down. You can't break down let's say, Kazakh Turkmenistan relations into a formula.

Q: Well we are going to pick this up. We will stop at this point. We will pick this up. I put at the end of the tape where we are so we will know if we have to pick it up at some point. We will pick it up where you and David are now married and David is entering the foreign service. We will see what a scientist views of American foreign policy, foreign service life and all that. This is 1968.

JONES: 1968 and part of '69. David is in the foreign service finishing his A-100 training, waiting his assignment. I am finishing up at the Department of Agriculture. We were planning a family. I had arranged for a post doctorate at Louis Pasteur because I had a professor who was French and who had done it. For free people love you. I was going to embark on the diplomatic life. I never in 10,000 years would have imagined myself as a foreign service officer.

In 1969, after French language training, David was assigned as a rotational junior officer at US Embassy Paris. This was the assignment that set the pattern of his entire career in the Foreign Service and that resulted in my taking the Foreign Service test and entering in January 1974. The post doctorate was arranged through a University of Pennsylvania professor Madeleine Jouillie. It was complicated by the fact that I was pregnant and expecting twins, though I didn't know it until hours before they were born. As a result, I was certainly enormously pregnant even in the early months.

At Institute Pasteur, I had two PhD candidates who were wonderful young men but very different from US graduate students. They always waited for technicians to do the actual lab work while they thought great thoughts. It did wonders for my French to speak and give presentations in French but my accent must've troubled them as they kept urging me to go Alliance Française for polish.

I had little knowledge of Foreign Service work, though I did meet the Science Counselor -- who was pleasant and on the periphery of the Embassy. I still remember him talking about a sniffer system to detect acetic anhydride produced by heroin labs -- alas, acetic anhydride reacts with water to produce vinegar. So an overflight of the Marseille to Nice area only managed to map all the French restaurants. As an Embassy wife and one who spoke French, I was guaranteed a seat next to the minor francophone contact. It was fun

and I quickly learned that the perfect ice breaker was to ask about the cheeses, the wine, and the politics of France. David loved the work and worked for people who became friends and who eventually set him onto a political-military arms control track that got him into the Senior Foreign Service -- with the success of the Intermediate Nuclear Forces Treaty. One of his supervisors also mentioned me in his efficiency report and suggested that I take the FS Exam-which they had just opened for spouses.

The twins were a total surprise and inspired me to ask for an anesthesiologist in perfect French as soon as I heard. In fact, I was so ignorant that I had had labor pains all night before they induced labor. Boy, did I worry when I heard the midwife say "two heads, I feel two heads." I remember, praying fervently for "two bodies please, two bodies." There was non ultrasound then. We had twin girls, each about 5 and 1/2 pounds, named Martha (after David's Mom) and Lisa (after my Mom). I tied up the washing machines at the Embassy apartments for months doing diapers. I used to take notes on who did what. I also improved my French by watching TV. They had all the presidential candidates giving speeches all the time. As a result, I began to think that sentences were supposed to begin with "je constate."

Q: More on Life After Paris

JONES: In 1969, we got back to the States. After a year in Vineland, New Jersey, where David took a year's leave to finish up his degree. He was able to finish everything except the dissertation in international relations. I was a substitute mathematics teacher for the High School and thinking of either going to medical school or taking the F.S. test. We had been remarkably frugal. Of course we had the money I had made in the Department of Agriculture, so when we came to Washington we were able to buy a house at a time when it was actually more expensive to rent than to buy.

Coming back to the States was interesting in re-entry terms. I still remember my parents were in shock at those bald little things - their grand children. And they weren't toilet trained yet. So they did a 24 hour Chinese special toilet civilizing routine, which is probably why the twins turned into engineers.

Q: When you came back how long were you back in Washington?

JONES: It was '72 before we came back to Washington. I don't have the exact dates. But from '71 to '72 we were in Vineland, New Jersey, where I got a job doing substitute teaching, mathematics at the local high school. This was working for the same woman who taught me math. Any chemist, particularly if you go on to graduate school takes enough mathematics to teach High School - in fact, we had much more math the average math teacher did. Then I thought of teaching as a possible second career, so I did take extra courses so at least I would be certified as a teacher in New Jersey. I found out what education classes were like. You really didn't need to read the textbook actually.

Earlier, in college my best friend and I had another friend who had a disastrous romantic collapse. As a result she couldn't do her homework. She had education classes. So the

two of us did her homework for three months, even though we didn't have time to read the books. So we would pick a paragraph and write an essay. I don't know how they didn't catch us because Deanna was an English major, so her writing was elegant, with beautiful choice of words, and at least 700 words long for a 500 word essay. Whereas mine was filled with every factoid I could build, and I could barely stretch it to 430 words. I even did some student teaching which was fine in Vineland.

The three months of teaching I did was very interesting. For the bright kids, algebra was no problem, but I had one girl who just couldn't get the idea, so I put her though the paces using numbers, and at about 70 repeats she got the idea what the little letter symbols did. But my best class and my best story is when I taught the general math class. They were practically counting on their toes. No one had taught them the multiplication tables. I was horrified. This was 10th grade. Not only that, a couple of them were clearly under the influence of drugs. There was no discipline, no dress code. I had one girl who was a gorgeous girl, but she wore transparent blouses with transparent underwear. These are boys aged 15 to 17. They were having enough problems getting their brains in gear. I had no disciplinary power. So one day, I wore 3 sweaters and opened all the windows. Pretty soon she covered up. I threw out the textbook. I taught them add, subtract, multiply, and divide. And I had one kid, Salvatore, who came to me and said, his uncle was really connected and his uncle was going to call me because I wasn't treating him well. That was because I was giving him zeroes as he wasn't doing his work.

That night I got a call I got a call from a male who identified himself as Salvatore's uncle and who asked why was I being mean to Salvatore? I said, "If Salvatore were a loan shark, he wouldn't know how to charge 5% on a \$100 loan." The Uncle said, "Really?" I said, "Yes." The next day Salvatore was all dressed up in a white shirt and told me, "My uncle told me to be very respectful." And he did his homework. There is probably a loan shark in new Jersey that is my fault.

At the same time, our twin daughters were growing more and more capable of taking everything apart -- they were clearly born engineers. They also ate everything living or dead and now should be immune to all parasites on their travels.

So I was very busy just surviving. David actually found our Arlington home -- I had no time to join him and house hunt. Our major requirement was to have a house that was close to the Department. So we got an old brick colonial house very nearby and he spent the next ten years picking broken glass out of the yard.

Q: How did things develop after that when you moved to Washington? When you moved to Washington it would be '71 or so?

JONES: '72 we moved to Washington. Then I took the foreign service exam.

Q: In '72.

JONES: I think it was '72, because it took them a year to get me my security clearances because they couldn't find my landing card from when I came at the age of 8 ½ in New York City. Fortunately they did find it. I had no problems with the written because I had read, as you know, all of David's textbooks when I ran out of reading material in Paris. It was standard general knowledge. They also had put in some science knowledge which is pretty much what any science student would have know. They scheduled me for an oral. During the oral they did not ask me a single question having to do with science. At the end of three hours I suggested that maybe they could make up their minds based on what they had heard already. I had already decided at the time that if I didn't make it in, the one alternative portable career would have been medicine, so I would have gone to medical school. At that point they passed me. Although the man that told me I passed said he was really of two minds because he thought I had a flippant attitude. I may have let's say been a little more humorous than the average candidate, but it worked out well. I knew I would be starting in January of '74 with my A-100 class. By then you were coned. I had picked the consular cone because I figured that at the Department of State, when David was back at State, was so short of anyone with any technical literacy, that there would always be a good assignment -- an assignment, more ambitious foreign service colleagues might not want. Overseas they were always short of consular officer. I had seen enough of David doing consular work as well as the work in the consular section in Paris. I used to chat with all the locals. I could see they needed a lot of people. They were front line, and it looked reasonably interesting. That was it. I was now a full fledged junior officer.

Q: With your A-100 course, what was your impression of it, the people and the training?

JONES: We were very lucky because they came in cones, so there was no fratricidal competition. There was also U.S. Information Agency Officers. There were only 22 of in the class. We had a Foreign service weekend at Harper's Ferry as part of the training. Our bus broke down on the way to Harper's Ferry right in front of the DC liquor store. None of had had breakfast. So the enterprising members of the class went in and bought a couple of gallons of really cheap Gallo Wine or something. They got back on the bus, and they partied. I sat next to a fellow Chinese American in USIA, Richard Gong who highly disapproved of this and I new I had better pass on an empty stomach. One of the most boisterous members of the class, whose name I will not mention because he is recently retired and full of years and dignity, managed to pull his sailor hat down over his ears giving him the look of someone who had an IQ the same as his shoe size. Unfortunately he led the charge by falling off the top step of the bus (wine in hand) - in front of our instructor. What a nightmare group we must have appeared.

I room with a very attractive blond USIA officer -- who went out with another member of the class. They must have had fun as I had to help her to bed at 2 a.m. The next morning you could tell who had partied as they were all green.

I thought the training was very well done. At the end of it we would get assignments. We teased each other a lot. We had one member of the class who was a firm believer in that women should stay at home. His wife was a Taiwanese Chinese. We had a woman called

Gladys Rogers from the State Department talk about women's issues. One of the points she made is if you have a wife staying at home and something happens to you, what happens to your spouse. So a wife's ability to earn a living was very important to the whole family. At the end of it we asked him what he thought of that. He said, "I am going to get more insurance." So he was not going to change.

At the time State Department just had a science bureau. Gladys Rogers felt they were under represented as far as women went. When it came to assignments I had a call from the science bureau who said they would love to have me. They didn't have a job yet; they didn't have a position yet, but they had a place I could sit. I thought, this is nuts. This is not the way I intend to do things. I found out that the Arms Control and Disarmament Agency actually hired science Ph.D.s to by physical science officers and they also accepted Foreign Service detailees. So I interviewed with them. They were happy to put this freebie into their Nuclear Weapons and Advanced Weapons Technology Section.

The logic is simple. Before you can do arms control, you have to be able to anticipate new weapons. You also have to understand enough of the technology if you are dealing with non proliferation to do something about it. And you have to be able to verify. All of these were technical issues. So my first two years in the foreign service had absolutely nothing to do with the State Department except as a member of another agency. I did notice that the State Department could use more science literacy, because basically the problem was not a foreign service officer who didn't know, admitted he/she didn't know and then called the right expert. The danger lay in foreign service officers who thought they knew but didn't -- facility with a few acronyms does not equal understanding. Invariably they could be made to look very stupid in interagency meetings - even sadder, they didn't even know they looked stupid.

My portfolios involved terrorism, nuclear terrorism, radiological warfare, high energy lasers, particle beam weapons, and so on.

Q: How did you find the ACDA, (Arms Control and Disarmament Agency) team you were working on. How did you find that?

JONES: Well they were fellow science types. One had gotten in fact his Ph.D. at MIT from my advisor's advisor, J.C. Swain, known far and wide as J.C. Swine. Bob Mikulak was a fellow chemist. The other one was Pierce Cordon. He was a physicist who had also gone to the University of Pennsylvania at one point, where he lost his calling for the priesthood. So they were bachelors. They were very nice. I also shared an office at one point with John Boright a Ph.D. in physics. We were "techies", and it gave us a chance to learn basically about the structure of arms control and political military issues. This was useful as you can't isolate the technical from the issue.

I also learned about the edit and re-edit culture in government. I had a boss who literally would rewrite phone messages. It was valuable being able to see how the State Department operated form the outside. I dealt a lot with the political-military bureau on arms control issues. I had a chance to represent ACDA for the national security decision

memorandum meetings on binary chemical weapons. Binary refers to chemical weapons in which the active ingredients are separated, so it is after you shoot the shell or drop the bomb that the rotation breaks a barrier between them and you mix it. It is a bit inefficient but safer to transport.

Q: CW is chemical warfare.

JONES: I generally did CBR Warfare (C is chemical; B is biological; R radiological.)

Q: Particularly at the time it still remains a certain threat but the Soviets were supposed to be quite far ahead in and be a tremendous threat in chemical warfare.

JONES: Oh yes, and one of the things in chemical warfare is that if both sides use it they handicap each other, because you have to wear the protective gear. We had some experience in developing incapacitants which had been used in Vietnam. They were going into persistent chemical agents, nerve agents. It was something where Bob, Mick, and I were very much dedicated to having a convention to ban these things. We had already had the biological weapons convention but it only covered research you and governments can cheat. Who knew what the Soviets were actually doing.

I also did a lot of projects for Rear Admiral Thomas Davies (ret.). Dr. Robert Buckheit, a mathematician was number two. It was sort of amused them to regularly send me to odd places. He would call his buddies and say he was sending his favorite Welshman, Terrance Jones. I'd show up. So I'd call back and say, "You had better get your security clearances through because I am sitting in the guardhouse at Livermore Labs." However I enjoyed the technical aspects.

Q: Well just to get a feel at the time, were we looking at terrorism coming form outside the Soviet Union, sort of PLO or any other group? Was that an issue?

JONES: It was then. It was always an issue in a sense, because as soon as you have a nuclear power reactor there would be security concerns. I actually worked with a group from Oak Ridge National Labs, to see what would happen if one actually destroyed a nuclear power reactor. Since we had no research money, I took an MIT study on the probabilities of different failures in a nuclear reactor - [using event trees]. If you have terrorist action, let's say, they manage to get in and produce a loss of coolant which is the most severe accident that can happen, then I could assign a probability of one to that loss of coolant event tree. Our results said that nuclear reactors were not vulnerable in the physical sense because of the use of containment structures. So yes you could create a true mess, but it would all stay inside, just as it really did at Three Mile Island. Three Mile Island is a major success despite all brouhaha at the time. There was no China syndrome. Hollywood is better suited for propaganda than realism.

Nuclear waste can be extremely radioactive, and any terrorist who didn't care about living could think using it. Nuclear wastes are contained in nuclear fuel rods which are

designed to withstand the interior of a nuclear reactor. You don't just blow it up and get a poisonous cloud to kill millions. Even Chernobyl damage was limited.

We found that essentially nuclear reactors were economically vulnerable, because to cause a "crash" in a nuclear reactor, you did not need to get the reactor; you could just get transformer stations outside of the reactor. We also had studies from Oak Ridge which gave a blow by blow how to destroy a nuclear reactor using conventional weapons such as by breaching containment with something like a 2000 lb. bomb and then following with a second bomb. The Israelis in fact did exactly that when they got rid of the Osirak reactor in Iraq. [Osirak was a small research reactor with 93% highly enriched uranium fuel rods supplied by the French.]

Q: Did you get any feeling too far removed from the diplomatic process using a modern term, the interface between ACDA and the State Department and its work on non proliferation?

JONES: State really wasn't paying a much attention to non proliferation at the time. ACDA I would say was considerably more up step when the Indian explosion occurred the so-called "PNE" or Peaceful nuclear explosion. ACDA had more dedicated technical people who had close ties with the International Atomic Energy Agency Safeguards Experts. State had a counterpart non-proliferation group who were with the Bureau of Oceans and International Environmental and Scientific Affairs. Later, nonproliferation moved to the Bureau of Political-Military affairs. What I did was get a chance to see the interagency process - which was useful though very slow.. ACDA's problems originated in a massive purge that had taken place years ago and which still left many hard feelings.

Q: This is going from the Johnson administration to the Nixon.

JONES: Yes, ACDA was just still recovering. Some people had managed to hide out and save their careers; but there were people with grudges against others; there were people who wouldn't speak to each other; there were people who had temper tantrums because they found out their ceramic agency seal was smaller than someone else's ceramic agency seal. They had lawyers - very dedicated and often very blind to anything but their own little line of thought. Some sincerely believed that if you changed a semi colon, atoms would stop fissioning.

Q: Well it sounds like in a way, and I don't mean to be disparaging but the carryover from what I understand, and I haven't experienced it, the academic world. You know the academic fights can get very nasty over minor things.

JONES: Yes. But I always was under the assumption that it was the people. I could never accept the mantra that the end justifies the means; instead, I believed that the means can forever corrupt the end. One thing science teaches you is if you don't know, you know that you don't know. That means you duct tape your lips and you stop, and you try to understand before you speak.

At 33, I was one of the oldest people in my A-100 class, so as a result I almost felt like a Dorm mom for the class. I felt that the only thing I could take to the foreign service that would be of value is a sense of professionalism. Without a strong sense of ethics - remember, my Confucian background - you can justify anything. I was not quite as ambitious as the normal Foreign Service Officer -- a career as a diplomat would be interesting and useful but had not been my end-all and be-all. This made being part of a tandem team with two careers easier to balance. Coming twin college tuitions were more of a motivator than achieving "confirmation" or "deification" as an Ambassador.

I was perfectly willing to let David's career take priority on assignments as his was much tougher to get good assignments and so on. I chalked had a wonderful two years at ACDA and moved without regrets.

At the time assignment systems were straightforward. They sent David to NATO. He was at EUR-Regional Political Military Affairs during the time I was in ACDA. His NATO assignment was a four year assignment - two years as the executive officers and two years as a political-military officer. I talked to the assignments people and took leave without pay for two years followed by two years as a Vice Consul in the Brussels Consular Section

Q: In Brussels?

JONES: In Brussels. This way there was no conflict of interest. A consular officer and a Political-military officer at NATO did not overlap.

Q: Well when you were in ACDA, who was the head of ACDA at the time?

JONES: In fact I think it was Davies.

Q: Did you ever run across Linda Gallini?

JONES: Oh yes, she was just starting.

O: I just finished a long set of interviews with Linda.

JONES: Yes, she was very interesting, a very bright and attractive blond.

Q: She stayed there the whole time. It is interesting because I got from her something you never get from the normal foreign service because she was civil service the whole time. The idea of a group of people this was a family with all sorts of you know, the problem uncle and all that. But the point was they worked as a family because they had been doing this for years. In the foreign service you have to make best buddies within two years because one of you will be gone after that.

JONES: Actually at the same time you don't carry baggage. Let's say the fact that you and someone else had a feud over a parking place at the embassy disappears when they have left. Actually it was ironic. One of my final pre retirement assignments was as a counseling and assignments officer. This is in '96, at the State Department. I represented all science officers They had a position in IAEA into which they wanted to parachute someone. My job required me to ensure that a qualified foreign service science officer got the assignment. So when I saw her again she said that they absolutely had to have someone with nuclear experience, IAEA experience with a Ph.D. in physics. I said, "I have the person" whom was then placed there over their protests. Later I found out the head of our mission to IAEA had a favorite he wanted to bring in from the outside.

Q: Screwing up the system, screwing up the arrangement.

JONES: Yes, so that failed, and then they tried a second choice who was a younger person in INR whom he preferred but who had no science background. So they had to eat their own words. But I had gotten the director general's decision that we could not violate the rules, especially since this person literally had every single qualification plus some and was a science officer. So we did it. Later I met the person who was in IAEA who was unfortunately shafted by the whole procedure. He asked me how they could have achieved it. I said, "Well if I were on the other side of the fence, I would have advised them to reclassify the position. After you reclassify the position it is much easier to parachute someone. But otherwise the way you went about it was the very worst possible way."

Q: So you and David are off to Brussels, Belgium, when?

JONES: We basically went off in '76. We came back in '80. So I had two years leave without pay, a chance to get to know my twins better. We were really fortunate, Martha and Lisa were very bright and very healthy.

Q: So you already had the baby.

JONES: I had Margaret, born in '77.

Q: Your third child.

JONES: Yes, the third baby.

Q: *Did she have hair?*

JONES: No. By something in the genetic mix they eventually had beautiful heads of hair, but it have my parents worried for years. After all, little Asian babies are born with long black fuzz.

Q: OK, how did you do the two years you were in, you only had a dose in a way not so much of the foreign service, but of a major element of diplomacy, and that is the arms problem.

JONES: And bureaucratics.

Q: How did you feel about the bureaucratic wars and all that when you came out of the arms control?

JONES: I thought it was normal in the sense that from my point of view, it was healthy to have a bureaucracy where people could speak up. Admittedly the end result resembled sort of a puree, taking little bits form six different agencies. It was better than any alternatives. No one was going to be marched out and shot for their views.

My view was formed by my experience as a little girl in the Soviet Union. I remembered watching a May Day parade with my mother, beautiful music, troops all over the place, girls all wearing their best. They were all chanting "Stalin is our mother; Stalin is our father; Stalin is our brother." My mother turned to me and said, "That is the real evil. It is not enough they have your body; that you are working for them; that you are doing everything that the state demands. They want your soul." I remembered that. Even when people disagreed strongly with me, their ability to do so was a reflection of the health of the system. At that point I had a more mature understanding of human interactions. I had seen the way that let's say testosterone could occasionally nix sense. That included the women who seemed to have the same testosterone attacks.

Q: During this time you were in ACDA, how did you view the Soviet Union?

JONES: I viewed the Soviet Union as an entity that was not interested in the ultimate survival of the UN, the United States, or its way of life. I had lived there and knew all bout the lousy shoes and ill fitting clothes they made. I even heard that when a shoe factory broke its last for the right foot, to meet quotas- they just doubled the number of left footed shoes. I focused mostly on Soviet military technical capabilities such as whether they could do high energy lasers; whether they could do particle beam weapons; whether they could leap enough to threaten our survival.

Q: Well as I recall there was much talk about lasers and particle beam weapons where the Soviets were considered to be pre eminent in this.

JONES: They were very good, partially because we didn't know how good. Just to be on the safe side, we had to make the kind of assumptions that had them as a bigger threat. They were very strong in power sources. Tough rugged reliable things. They did something like magneto-hydrodynamic generation. When you want to have a laser beam come out at a very high energy, you have to provide an input at a very high energy very fast -- making it a weapons laser.

Q: Well then Brussels, let's take sort of the domestic side. How did you find being a foreign service wife again with three children and all.

JONES: Well first I had two for awhile, and it was nice to have time with Martha and Lisa, though I did have nine months of morning sickness with Margaret. David just took over the house of his predecessor in a small Belgian village called Everberg -- an easy drive to NATO. This saved us a lot fuss and bother.

I am pretty indifferent to interior decoration, if I did a house myself, it would probably look like a lab with drain traps in the floor so everything could be hosed down. The girls were at a very good age at age six they were discovering engineering skills. They used dental floss to launch their Barbies from the third floor stairs to greet their daddy, practically decapitating him. They made pulley systems set up and had never played with Barbie dolls without building elevators for them. Now (2007), one is a radiologist with a MD/PhD from Johns Hopkins and an undergraduate and masters in Electrical Engineering; and the other has a PhD in chemical engineering from Cornell plus leading her class at Penn Engineering and is doing leading edge work at Intel -- so they did turn out to be engineers.

Q: Well did you get involved in the social life of the embassy?

JONES: Of NATO mission as the spouse. Dave was the Executive Officer and Ambassador Strausz-Hupe had once been a professor of his at Penn. I even attended one of his lectures when I was an undergraduate and they were allowed to bring guests. I remember thinking he was going to fall off the speaker's platform, the podium because he had a habit of grabbing it at the sides and leaning forward. You would see the whole structure start shaking. Though he had a reputation for being a terror to his Executive Officers, he was very good to David. There were no extra demands.

His wife had died a year earlier when they had 13 at a table. So the only time I remember was being called in on an emergency basis to attend to prevent 13 being at a table. I got to know some of the other wives. One of them, E Pendleton lived right across form the American school. We had decided on American school as I was knew our girls liked structure - the more American the better. I also knew what it was like to learn a foreign language as a child. As a result I did the usual mother activities. I helped with some overnight things where I basically escorted little girls to the bathroom all night. That was it

O: Well in '78 you started the consular thing at the embassy.

JONES: At the embassy. I was the sole vice consul. The consul was Jim Lassiter, and he had a family emergency, so two months after I was there, I was in charge. The family emergency back took him months to resolve. Then he was back just a few months before going onto another assignment in Bucharest. While he was in the US, one of my first tasks was to ban his wife from the section as she had been using the consular employees to take her dogs 60 miles to SHAPE in Mons or Bergen Belgium for vet care. That is a

no-no. So I decided if ever I was canned by the foreign service it would be because I was doing the right thing not tolerating the wrong thing. Fortunately he was actually grateful that I had done it. I did endless visa interviews, visits with prisoners. We had wonderful Foreign Service Nationals. It took them awhile to figure out that I could understand their rapid fire French. Fortunately by the time they figured it out I had also figured out that two groups had not on speaking terms for 15 years and had been passing notes to each other in the section

Q: Within the section.

JONES: Within the section - the Flemings and the Walloons did not get along well. I also realized that not only could I save money if I eliminated overtime during the summer months but I wouldn't have to work overtime. Fortunately, I was able to offer the FSN's early departure to catch their trains if they finished their work. Amazingly enough, we only had two hours of overtime for my entire tenure. I would say production went up about 30%.

We had one logiam at the old Automated Visa Lookout Systems (AVLOS) which no one wanted to do. You basically typed out the information and send it on a tape to the Department - the way communicators used to send cables. So I suggested that we all do it. Any time somebody walked by that pile of passports, we did ten of them. First, I did the first ten and kept doing it as promised -- eventually, we completely eliminated backlogs and made the whole system much faster.

But consular work was very much about just running things and doing the best you could. You know that you had a real impact. I was glad that I kept my word to the Assignments people and did not jump at an offer from the DCM at NATO to take a science position on the Committee for Challenges in Modern Society.

So the Consular work was very interesting. I now have a life time of consular stories, none of which I would dare write up because I am sure they would recognize themselves.

Q: One of the things I try to gather here are some of the consular stories. Let's take arrest cases. You don't have to mention names.

JONES: I probably don't remember the names. Ever since I have done things where other people's privacy is involved, I try very hard to forget all the names.

Q: Which is a very good practice.

JONES: So nothing is ever going to slip because it has long since been erased. OK, one of my arrest cases convinced me that the master criminal image is definitely wrong. A young man decided to go to Amsterdam, picked up some hashish which he was going to take to Germany where he was living. He was an American. He planned to sell it to the troops. He did not want to cross the German-Belgian border which had anti terrorist patrols all over the place after a group of Japanese Red Army people had killed

people at the Rome airport. So he decided to cross into Belgium at a place called Vise, and then into Germany. Well hiding eleven pounds of hashish under your VW floor mat doesn't work, especially since Vise is one of these border crossings where they catch them all the time. I am not even sure the people who sold him the stuff didn't sell his name to the Belgians, so they got him. I did go to his trial and discovered the difference between the European system and ours. There is no such thing as questioning or witnesses. A prosecutor got up and said, "Maximum penalty. This person deserves it. He is swine." The defense got up and said, "think of his poor mother, mercy." Anyway they sentenced him to five years, which, with good behavior, was more like three years. I visited him in jail in Liege. He could get work in prison and earned \$150 a month while there. The only complaint he had was he was getting detergent hands from scrubbing the toilets, so I was able to convince the prison to please give him rubber gloves.

For some reason my counterpart in Antwerp had really bad arrest cases. He had pedophiles. Mine were really pretty harmless in comparison. I had another one who was a scam artist. He had convinced Belgians to give him their black cash, cash they had hidden from the revenue people. He told them he buy and sell them in Africa, making tremendous amounts of money. What he really did was take the money. He was very careless and he didn't pay his rent. In Belgium that is something they would arrest you for. He didn't know any French. So when they arrested him for not paying his rent - he had no idea why they arrested him as he spoke no French or Flemish. So, at the police station, he said, "I confess." That, they understood, and they let him go through the entire confession before they called a consular officer. By then he had implicated, I don't know, a couple of hundred Belgians. So the Belgian prosecutor was delighted. I noticed that they held him about full 71 hours and 52 minutes before they called me. We fielded a number of calls from worried Belgians. Eventually he was deported from Belgium. He ended up in Austria, and, the last I heard, he was running some scam there.

Q: Oh yes, well once a scammer, always a scammer. How about distressed Americans out of cash and that sort of thing, though it was a bit more in Antwerp.

JONES: Antwerp got a harder crowd basically.

Q: Well in Antwerp was there the equivalent of what they have in Amsterdam, a red light district?

JONES: They did in Brussels too.

Q: That always creates, well anywhere, go get robbed.

JONES: We had a certain number. The problem was with pedophiles-especially gay pedophiles. The first major visa refusal I had to make was against a man who wanted to import his Algerian adoptee, a little boy, to the U.S. It sounded so fishy, I called the DEA people and said, "Look, is there any information, just informally. I am not going to cite it." They told me this man was a professional. He had bought the boys regularly through legal adoptions No one checked. No one cared. And then he would pretty much turn them

out into the streets when they developed a mustache. So I tuned him down. He was furious and said because of my turndown it was going to cost him an enormous amount of money. He had to anchor offshore outside the limit. But clearly there was a serious pedophile problem in Belgium and it often surfaced in other nasty cases.

Q: Was there a system, I mean you ran across this is an American pedophile isn't it?

JONES: No, it was a Belgian pedophile. They had a seasonal trek. During the winter season in Miami when rich Belgians went there, they went with their little boys.

Q: Was there a system in place where you cold tell the immigration people, I mean sent out essentially we turned him down but OK this guy is a really bad guy?

JONES: What I did was in many cases I would tell the DEA people this person tried to leave Belgium to go to the U.S. for this, and they would pass it on to their police contacts. I mean I don't know what Belgian law was, but they certainly didn't seem to be doing anything about it. I think in the past few years they have had enough scandals in that area.

Q: I follow the French/Belgian news and they have had some real pedophile problems.

JONES: Oh yes. It is very much a class thing. If you are upper class you just thought you had rights. We had one person we did a background check and ended up with a police record a yard long. But he had all sorts of titles, had been invited to the ambassador's parties, had invited the ambassador to his chateau. In consular work, you began being suspicious of everything after awhile. We also had the Holzman Amendment - in which was that anyone who had been a Nazi, supported Nazis or suppressed others during WWII was denied visas for life. Well, we had a large number of Belgians who had been sentenced to death after WWII. The Belgians did it in a very interesting way, first they sentenced everyone to death, and then they went through each case and commuted the ones that shouldn't be executed. We had one man saying that yes he did do all sorts of awful things, and he had a criminal record, but he did it as a criminal not as a Nazi. S o he robbed banks regardless of the racial or ethnic origin. He also robbed houses; he robbed people.

We ended up with a person at NATO a German. It was really tricky to tell. We regularly had the fallout still from WWII. We had a very nice Belgian woman who had an arrest record for running cat house after WWII. Then she as ran a very good restaurant instead. She had grandchildren in the U.S as her daughters had married the nice American soldiers who used to bring her hams. Every time, she went to the U.S. we had to get a waiver because she was 212 A-9 (felony record). One time I had to translate and explained that she had run a bordello to INS office. Their reply, "What is a bordello?" So I had to spell it out. They still didn't get it. I asked them to look it up in the dictionary. They didn't have a dictionary on hand. So I had to explain bordello. All this time I had forgotten we had gotten one of these cheap lowest bidder microphone amplified every sound on either side of the bulletproof glass. So when I finally finished the interview, I came out and saw a whole group lined up at the window waiting for the next act.

Our consul at the time, he came back from the states he had his dogs. One of them was named Pita. He would let his dogs out via a sliding door to an inside garden but weren't very obedient when he called. With this two way system we could hear this male voice screaming, "Lie down, I told you stay on the couch, Pita." They would wonder.

Q: Oh, boy. Did you have any problems as consular officer with the rest of the embassy saying, well this is the nephew of the prime minister's secretary who is my best contact. You can't turn him down or something like that. Did you get into this?

JONES: Yes, I had no problems with the political section. They just asked me any time I got a Zairian politician who was usually supported in Belgium by one of their parties for an interview, to also bring them in for the interview. That was easy. I had a requirement that they put it in writing. In other words, if they wanted special courtesy reasons they had to write it down

The only time I had problems was a Filipino general and his 16 year old secretary who was gorgeous. They wanted a visa for her so that she could accompany the general on a trip to the States. I said, "You have to put it in writing. I am not going to issue and then find out this girl has disappeared and is being a working girl in New Orleans." So holding their noses all the way, I got this extremely cautiously worded request

Another time I had two Afghans who were automatic refusals: i.e. out of district, no ties to Belgium, but they actually were connected to another part of the embassy. When I refused them, they finally said, "But we have a name we are supposed to call." Finally, they did get to the right section and I never heard from them again.

Belgium was a very easy consular posting, especially when we got a large number of Iranians who came out after the Shah fell. At this time, the U.S. hostages were still being held in Iran. My decisions were made easier because Iranian who made it to Belgium could benefit from all the Belgian refugee protections. No one was going to expel them or shoot them. I could handle cases on a case by case basis, without the feeling that I was condemning someone to death. Belgian Iranians were no problem as we had been issuing them visas on their Belgian passports for decades.

As for the others, at worst I was costing someone a week in New York City. Unattached males with passports that had been over written by the provisional authority with just a stamp were not good bets. Usually, the minute I turned them down they would threaten to cut my throat, and go into an anti American tirade. My rule was if I were going to call for help I was going to call for the Belgian Guard. Better a Belgian Guard beats them up than a U.S. marine.

Q: I was interviewing a lady, Janet Folk, who was in London about this time. She was saying sometimes it was the flavor of the month with the Iranians, young men trying to get the hell out to the United States and not get into the Iranian army during the war with Hussein. They heard that Iranian Christians were getting special permission to go to the

United States. She had one who came and said he was a Christian. She said, "I am a little bit confused because I see by your passport that your first name is Mohammed."

JONES: We had a legend that there was a Farsi speaking officer who had left Tehran right before the hostage take over because he had suffered a nervous collapse from the stress of dealing with Iranian visa fraud. They sent him to London. Then of course the hostages were taken , and there he was in London under a window that said, Farsi speaking officer. He had a chance to see all of his old cases. I do remember that we had had no guidance from State although the hostages had been taken months ago. Every post that had Iranians coming was sending requests for guidance in vain. It was not a decisive administration in Washington.

Q: I was consul general in Naples at the time. We were left on our own.

JONES: Oh yes, so we refused and we refused. Every refusal was a congressional. We had a rule then you had to answer a congressional within 24 hours; the cables were often classified. So that meant that - moi - my little ten fingers had to type the cable. My cable skills were awful. In those days, if you had to delete a letter that you typed one star after it; two stars for a line; and three stars for the whole paragraph. My cables went into the communications with a field of stars.

Q: Well then in 1980, whither? In the first place how did you find I mean this is your consular assignment, there you were pretty much it for a good part of the time. How did you find your consular training helped or was it just a matter of having books and manuals and you looked up the problem.

JONES: It was very helpful. They taught things you could not get from a book. The consular officers who did the training in the course provided sort of a basic ethical framework - which is fairness, honesty. When it came to U.S. citizen cases which are really difficult because the U.S. citizens that often need help are not our finest examples. He gave us a special lecture saying, "This is the deal. A U.S. citizen with a U.S. passport is owed this by you. It doesn't matter if they are crazy; they are an murderers, whatever. It doesn't matter how poor they are, how old, whether they are the dregs of society. It doesn't matter. You have a duty. You don't just blow it off because this is a person you would never want to have anywhere near you normally." I found that helpful.

The local employees were extremely intelligent, all university trained, and in our section bilingual in Flemish and French. On the phone the person couldn't tell if you were a native Flemish speaker or a French speaker. That helped a lot. They new the Foreign Affairs Manual ten times better than I did. I was only useful to them because I was a toxic waste dump. I only needed to see the bad cases. For things like a plane load of Belgian weight watchers going to New York City to buy cheap big sized clothes, they didn't need me. By '79 or a little before '79 I had a new consul.

O: Who was that?

JONES: That was Robert J. Bel. He died a few years ago when he was consul in Jerusalem. Hs wife was Belgian. He had been a communicator and a former marine. In his earliest assignment in Belgium he had been hit by a tram. The NATO hospital people assumed he was inoperable since he had been hit in the head, and that he was going to die, but his girlfriend at the time, and later his wife - I think her name is Marianne - found the best neurosurgeon in Belgium and saved his life. He was very good professional consular officer. He didn't want to be a DCM. He didn't want to be an ambassador, but he knew how to run things. He had a fund of great stories.

He had two sons. Occasionally I would give him a ride home because it was right on the way back to Everberg. I would see his boys waiting for him. It was really very sweet. He was subject to epileptic attacks, because of scars from his operation and was careful to prepare me for any attack. He was sort of very proper, very correct. I was always grateful that when there was a consular conference in Rome, he sent me. He said that he had an assignment in Rome for years, gave me the name of his favorite restaurant which was wonderful.

So David came as the spouse to Rome - the Hotel Flora. I went to the consular conference where you learned a great deal, not so much from the formal program but from the way people dealt with things. You need people to teach you. The same is true in science, it is an attitude. It is not just the technique.

Q: Well then you left there in 1980 and where did you go?

JONES: Oh the State Department, OES by then had nuclear non proliferation. I knew John Boright. He at the time did not have a position but his colleague Mike Guhin had one for a non proliferation and export controls. So I went straight in to that position. David had actually met my predecessor in that job, another science officer called Adrienne Stefan. From talking to her, he had gotten a very good idea of the demands of the job. So when I arrived I was able to explain to Mike that while I would get all the work done, I had a rigid childcare schedule and would not just hang around to look good. If he didn't like that, John Boright was willing to swap officers. Dan Ujifusa was interested in more international work and I had no problems with more technical safeguards work. Mike, to his credit said, "Oh no problem." As it turned out in my two years there I think I had to stay late one night. That was it.

Q: Well we are going to pick this up the next time, 1980 to when.

JONES: OK, well I then stayed in the states for a long time because basically of a medical problem that required it. I was also delighted to find out that the great mother lode of all science and technology assignments in the Department of State was in State itself. In Embassies, there was more helping visiting delegations and less serious technical work.

Q: So you were there starting in 1980 until when?

JONES: Until I went to Canada in, when did I go to Canada? '92 a long time, ago.

Q: OK, so we will pick the twelve years up in the State Department and all that next time. Today is 1 August 2007. You were in the State Department from when to when now?

JONES: Basically from 1980 until I left for my Canadian assignment which was '92.

Q: OK so you come there you started in what, OES?

JONES: I served in a variety of offices. I had two years in OES, nuclear export controls. I was sort of the in house technical expert. I found that nuclear engineering was basically chemistry-so the technical details were made sense to me. Nuclear export controls require you to understand the peaceful uses so that you can understand how potential proliferators could use a "peaceful" program to achieve weapons capability.

Then I had three years in the Bureau of Intelligence and Research where again I covered strategic technologies. Before you can do anything you have to know what you are trying to anticipate. You can always have a shock from a sudden change in capabilities, let's say satellites. The ability, for instance, to locate a nuclear missile submarine using its Kelvin wake in real time from space means that you can take out nuclear missile submarines—one leg of the Triad. I enjoyed it a great deal, particularly the work on Science and Technology Intelligence Committee which gave me a chance to travel to all the major Department of Energy national labs—Sandia, Los Alamos, Livermore and Oak Ridge. I found the DOE technical intelligence people to be first rate as they had real experience in the work while the CIA technical analysts tended to be stronger on academic credentials than on hands-on feel for their subjects. Understandably enough, DIA analysts had a narrow and intense focus on what makes a real difference to troops in the field (number of tanks, location of tanks and such)..

Q: I want to move back to the OES. What, you say you had the issues of export control.

JONES: Yes, and non proliferation also.

Q: What was going on in 1980 to '82 or so in that field that you were particularly concerned with?

JONES: Basically the situation had become one of holding actions. In '74 the Indians had already set off a "PNE" a peaceful nuclear explosion. So the cat was out of the bag. IAEA and its entire safeguard systems were beginning to look more like paper mache tigers than real tigers. There were no real consequences for a country in let's say violating safeguards or setting off a nuclear explosion.

Nuclear programs take a long time, so we knew that a large number of countries had been maturing, had intentions in that direction. A large number of companies particularly in Europe, Italy and France, Portugal, Spain, Germany, were very eager to make sales, and they really didn't care whether their special alloy steels were going into centrifuge

systems. URENCO security had already been breached when Mr. Khan had stolen the centrifuge plans and taken them to Pakistan.

Q: He is sort of the genius...

JONES: He was the father of the Pakistani nuclear program. He stole plans for the small centrifuges used by URENCO which made catching them much harder. At the same time I think this was before the South Atlantic event where you had the VELA satellites pick up the signature double flash of a nuclear explosion. When an atomic bomb explodes it heats the air. You have the initial flash of the explosion. Then the air is heated to such high temperatures that it is opaque until it cools off enough and you can see the light again, so it is a very particular double flash. And a VELA satellite, which was designed to give early warning for a ballistic missile launch, saw it. We did know that the South Africans were investing in the Becker Nozzle process which is a process that depends on the fact that at certain speeds and under a magnetic field the different uranium isotopes would end up with different arcs of curvature. So you can collect them with plates at different points. That one was extremely labor intensive, and extremely energy intensive., so it was more or less in the line of like Oak Ridge Gaseous Diffusion Plants, which can be easily seen as the plant is almost a mile long with the Tennessee Valley Authority Electrical Power Plants feeding its energy needs

The work was very interesting. The politics were reasonably poisonous in the sense that when President Carter killed U.S. reprocessing of spent fuel to support his nonproliferation goals. This went a long way to killing the U.S. nuclear power program. This was the days before people were worried about global warming. And as allies he had all the groups that were basically very anti nuclear because they were very anti death, death being represented by radiation - even though light and heat area also "radiation"

I worked with Bob Gallucci in OES. I will only say that if there was a way to believe intelligence and interpret it to fit his preconceptions, he did it. It was very innocent in a way, and he truly believed it would be a better world, the world he envisioned, but alas my feelings at the time on all these programs was that they were doing exactly what the intelligence indicated they were doing. He and President Carter showed this kind of rosy vision of other intentions when first negotiating with the North Koreans. I understand that they completely ignored any intelligence contrary to their bias in favor of trusting the North Koreans.

Q: Well back to the Indian Ocean, South Atlantic event as it was called. What was the analysis that you were picking up. What was the who did this and why?

JONES: The analyses came in different directions. The straightforward analysis from the national labs was done by scientists some of whom were old enough to remember when we did open air testing. Even if it was the 50's and the instruments were crude, they had a very good feel for it. They couldn't find any other explanations, despite attempts to describe it as bubble lightening flashes. You rarely get two lightening flashes of the same intensity or duration. The flashes were mapped showing time on one axis and intensity of

light on the other. The size of the peak, the relationship of the peaks to each other are a signature. There was a great deal of confrontation, argument back and forth. It didn't change the fact that no one knew. There were rumors.

To me intelligence is very difficult in the sense that it is very much like early scientific theories. You have very little data. You try to make some sense out of what might be totally chaotic material. When you try to make that sense, you automatically bias it. So the only check you have is when you are proven wrong. You say well, if I am right and my theory is right I will try this. When that blows up, you say oh, maybe I didn't count that, and you try that. So with billions of tiny little steps we marched forward toward plastics and to better thermal underwear and so on This is a chemists kind of view. We are not much into big, giant theories. But it was very easy to see what you thought you should see. It is like bad proofreading. You see a sentence and you see what should be there. You don't see the fact that you misspelled the president's name.

At the time in the State Department there were always the people trained in political science or international relations who knew all about the great power moves, the history, and even Games theory. They know how groups of people will work - they want power used for good and they were firm believers that the end justifies the means, forgetting that occasionally the means can corrupt the end. The sad thing, some were even unaware that they were stacking the deck and distorting the facts. The path to disaster can indeed be paved with the highest minded intentions.

I will say that I was frankly well shielded in my work. I was supposed to come up with a technical explanation. Most of my writing was actually just to make sure that the technical things were reasonably correctly written and that an elegant phrase didn't translate into inelegant physics. That was a lot of fun. I enjoyed it. I found my colleagues wonderful.

Q: You sound one note but it is such an important event over this South Atlantic thing. In the first place I would think that if you have got satellite pictures, you could take spectrums of what happened. I would think the whole thing would fit into, I mean it sort of is or ain't a nuclear explosion.

JONES: The difficulty was these were Vela satellites. Vela satellites were designed to catch the basically a warhead coming in. During the point where you would have a warhead burn, you would have a strong infra red signature. So they have filters on them. As a result you are not getting 100% of the picture. Our data handling processes were much less sophisticated then. There is always the danger of instrumental error. You could for instance have had a double short for all anyone knew. Any time you are collecting light, you are depending on the fact that you have molecules at this end that react to a light flash, which can be converted into an electrical signal which then can be noted digitally. When something is noted digitally it depends on the resolution which is determined by how many little itty bitty pixels you have divided it into. So the technical people had every reason to continue chewing it over. I am sure they felt they still could

until the year 3000. At the same time the political people had to look for the political aspects or why and who.

You don't need to do an open air explosion that can be detectable. We had become, and the Soviets also, world class experts at doing it underground. We could test our warhead hardnesses and so on by having concrete lined tunnels that went from the point of explosion to where ever we had the instruments. We even had instruments that you could put down the actual hole into which you lowered the explosive. They were called SLIFERS, Shorted Locating Indicator for Electromagnetic Radiation.

While we were negotiating with the Soviets on the threshold test ban treaty, the threshold being I think 150 kilotons, we needed verification that there was no cheating. The seismic signals are not enough to gauge the size of the explosion without knowing the geology. For example, if they set off an explosion in a cavern instead of a little drill hole, the signal would be dampened and our estimate would be wrong. We offered, in the goodness of our hear, to share the SLIFER technology with them so that we could get the data. In other words we would end up with something attached to their explosive. The explosion crush the cable and cause a short. A very high frequency magnetic signal would go up and down the cable and we could record the short formed as the cable was crushed by the explosive -- this would then give us a picture of the explosion that was directly related to the size of the nuclear explosive.

The Soviets predictably said, "Never. Touch our thing? Absolutely never." In fact the Department of Energy (DOE) national labs sent us an example of the SLIFER coupling unit ACDA for transmission by diplomatic pouch to Moscow. One of my unnamed colleagues managed to drop it, break it in two and more or less cram it back together. We figured they would be able to figure it out as it was just a connection.

In general, intelligence analysis is tricky and there were a whole lot of areas in which the politically directed people looked at things one way and called on the intelligence communities, especially the technical ones to conform. The CIA was very politicized. They hired people with Ph.D.s, but little experience and sometimes little understanding of how their estimates could be distorted. They did not have enough working knowledge and they were under immense pressure to produce, and to produce things that would get them noticed -- often, in accord with the prevailing political desires. Given this type of pressure it was almost impossible for them not to be alarmists.

From 1982-1985 I represented the State Department. My Ph.D., was useful as a title but proved nothing more than that I did one project well. So I saw my job as keeping the analyses as honest as possible. This meant footnoting dubious conclusions so thoroughly that by the time they saw the horrible mess, everyone would say, "Get me some aspirin; I don't want to read this." The footnotes were necessary. It is just as important to know that you don't know. Unknown unknowns can kill you.

Q: I would like to make sure I understand this, particularly the people who are doing this because it is very important aspect. I mean in science you have people who have the

proper initials after their name and all, but often I take it they are not always the worker bees who are really down, I mean they don't necessarily have the working knowledge of some of the things they are analyzing. Is that correct?

JONES: Yes, in this way. You have to differentiate basic science, theoretical science from technology. In science you can become extremely expert in one area without even the ghost of knowledge in another. I will give you one example. This is later when we were dealing with export controls. We were dealing with the sale of certain kinds of machine tools that had multiple axes capabilities. The sellers, a big Italian company were very interested in this sale. Selling machine tools is really big. It is not the machine tools that made you money, it is the service contract on those same machine tools. We said it could be used to improve Soviet tanks. The analyst who was doing this was a very bright, a young woman - an engineer. But she never worked in the area. So she did not have the kind of background that made it possible for her to understand where the machine tools fit in tank engine manufacture. So, perfectly honestly, she rang all the alarm bells which really made her political bosses happy.

To get a clearer picture of an area where I was truly ignorant, I went to people who actually made this kind of tank, who used similar machine tools and I said, "Ok what difference would it make if you had this capability?"

Their conclusions were totally different from hers. They said that it didn't make much difference as the Soviets were already using this type of machine tool. It was not a miracle solution. Soviets were making tanks perfectly well with their existing tools and technology (something the DIA analysts strongly agreed with). This was the kind of understanding that the CIA analyst lacked.

My strongest asset is knowing that I didn't know. My ego survived this admission of ignorance nicely. And I knew where to find the people who were the real experts.

In another case, we had a furnace for draining off slag from melted aluminum leaving the pure metal in the furnace. It is just a high temperature furnace with a tap at the bottom. DOD wanted to put an export control on it without any understanding of how these furnaces were used in general. The national lab experts were amused as every jeweler in town used one of these furnaces.

Q (on Soviet technical capabilities - no exact text available)

JONES: They were very ingenious, good mathematicians. A computer works by the way you organize the bits. A word or byte is eight bits. We had processors that could handle in those days 32 bytes at that time, but the Soviets did not. The more that you can handle means that you can have more sophisticated programming, more parallel capabilities and it makes for faster computation speeds. To compensate for this, they were able to do special architecture which they took what they called bit-slice, eight bits tied to another eight bits located somewhere else, tied to another one. So there was a lot of ingenuity. At the National History Museum in the Bay that described the U.S. Moon Landing Effort, they had a frieze which showed U.S. and Soviet space capabilities from Sputnik to the

Moon Landing. First, we were way behind (remember, the Vanguard catastrophes) and then - slowly, inexorably, we moved ahead and finally we sped ahead. I could see why Gorbachev decided they couldn't win the technological arms race.

Alas, we have to keep in mind that people kill each other perfectly well with WWII surplus weapons.

Q: In fact we are approaching the period now where all the technology in the world doesn't protect you from a suicide bomber. I am trying to get a little feel for the dynamics. Correct me if I am wrong, but I get the feeling that you had your technical experts coming out of the CIA who were in some ways were driven by the idea saying this thing shouldn't get out. You are always safe doing that, whereas when you looked at it at myriad from INR or OES, you say well hell, it really doesn't make any difference.

JONES: Or it doesn't make sense. It got so bad in fact that Congress in the Export Administration Act added something called Office of Foreign Availability to be run under the Department of Commerce. What brought it to a head was Chinese telephone system. The Chinese were ready to upgrade. They could upgrade the phones in several ways. For obvious reasons those upgrades that went out into the air were preferable.

Q: We are talking about the National Security Agency.

JONES: Yes, and cell towers and so on. But those that had fiber optic links were much more complicated. There was something called time division multiplexing which allowed your call signal to be digitized, mixed with all the other call signals and only reunited at the receiving point -- obviously, this made for much higher transmission volumes but also made it much harder for anyone trying to listen to the calls. In other words you might think telephone signals of them as a string of patterns with a little tag on them. They could break up this string into itty bitty little pieces and with the right capabilities, re unite at the other end. So when you were speaking to your aunt in Tulsa, Oklahoma, you didn't notice any interruption, but they were able to pile into the same wires, 10,000 other conversations with other people speaking. It was just a way to expand and also to harden systems.

Suppose a hurricane or a tornado took out one of the little nexuses in between the two of you, the system would automatically reprogram itself so that it would go through Chicago instead. You would still be discussing something with your aunt. If the phone companies could not sell something to the Chinese that the Swedes, with no export restrictions, could -- all our restrictions would do was hurt our own companies.

The Department of Defense at the time had someone called Steve Bryan (sp?) who was one of Richard Perle's people - the black prince. I used to remind people that the black prince was also Beelzebub, and none of them talked about him that way. Steve Bryan was very political. Once, when he was trying to stop an American from traveling -- he was so far out that the Customs guy (somewhat to the right of Genghis Khan) gave him a lecture

on constitutionality. It made me very glad I worked in a system where he just couldn't say, "Take her out and have her shot."

I coped. In Office of East West trade which was one of my final assignments I chaired a working committee, the Economic Defense Advisory Committee II, which prepared all the position papers for COCOM, the Coordinating Committee. DOD always wanted incredible nonfeasible. Commerce wanted to protect the U.S. technological lead and market share. State Department was usually caught between these two juggernauts. The White House had all sorts of true believers, who were very bright and very capable and very young and still had not gotten the idea that they should re write all of the intelligence to fit their views.

This was a constant regardless of the Administration's political party. It was very hard for many people to say no at more senior levels because it really was their careers. It wasn't going to hurt Terry Chin Jones to have acted like a wet blanket in a meeting and saying you don't have the evidence, you don't have the evidence, and if you send people out as technical experts - they had better not be political hacks. We wanted strong positions for our delegations and saw no utility in political posturing to impress their bosses here.

You see, they wanted to send people they trusted. Fine, you always want people you can trust, but when you are going to something like COCOM, you are dealing with other countries who would send their top people. Think of a tank factory specialist and a pet Lieutenant Colonel who only had his briefing notes in a major technical discussion. My view was that you never help any kind of a case without top people, especially when it came to science. In a technical discussion, especially one that means hundreds of millions if not billions of dollars in trade dealing with what they call red lines (i.e. a line below which you could export without licenses and a line above which you had to go through the process) - you needed to make really persuasive arguments. The export licensing process was horrible and, I believe, remains so to this day

Q: When talking about experts you say the top person, my as a bureaucrat in a completely different field, the consular field, if you had something dealing with a citizenship matters, if you had the consul general you probably were ending up with somebody who was removed from the process, and it was better to have a consul or a vice consul who really was down there dealing with that particular subject and knew it. I would think this would pertain in science too.

JONES: I will give you an example. There was serious concern about the access given to supercomputers by people from Red China and from certain Eastern European countries. The super computers have multiple uses. They are used for wind tunnel analysis etc. and weather prediction. So it was definitely a multiple use thing. So DOD argued for very stringent controls and the State Politico-Military Affairs Assistant Secretary was of like mind. I did have enough background myself to make a strong argument, but we were very lucky. The Department of Energy had a person called Steve Hue who was one of the original team with Seymour Cray who had created the first super computer.

Q: That was the Cray super computer.

JONES: Cray, and who worked at Los Alamos. He was very familiar with it. He was a very hard nosed Chinese American engineer type, but a software genius. I brought him in to brief State Department on what exactly would be the risk of someone having access let's say to our Boulder, Colorado, supercomputer, to all the software to everything to do meteorological analyses. His view was that it wouldn't make much difference. The concept of parallel processing was already out. Once you knew it could be done, you were already dealing in a different level. And he argued that indeed of course you want to control access to these things etc, but it was not anywhere near the make or break kind of situation that was presented. It was not anything like the analyses from several agencies which I will not name, who basically said it was the end of the world and they would end up with a MIRV warhead the size of your lunch pail.

Q: Excuse me but would you name the agencies. I mean time has gone on.

JONES: OK it was basically I would say the CIA. In DOE people worked with nuclear weapons all the time and had a very realistic view. They are far away from Washington, very careful of their caveats. They would say when they actually didn't know. DIA was highly specific. In other words when it came to counting tanks there is no better agency in the world. They paid attention to things that would make a difference if you were going to fly in troops. They want to know where the such and such union is, where their headquarters are, how much electricity they are pulling from the local grid etc. So they were down to earth. The CIA technical people were supposed to use their arguments to support the political views of their leaders. It was probably worst under CIA Director William Casev because he came to a meeting of Science and Technology intelligence Committees subgroup that was going to do the Soviet military R&D analysis. He not only attended he ordered us to come up with the "right" conclusions. I was in shock. I don't think he knew there were non CIA people there actually. But after he left I said, "We will all do the most honest job that we can, and I will footnote up the wazoo if it isn't. They were just as horrified as I was. There were people who were there who were saying they had worked with totally horrible directors at CIA in personnel terms who had never ordered them to change the results.

Q: Did you get any feeling of what was behind, almost all of this pressure was to limit as opposed to let it go.

JONES: There was almost no pressure to ease export controls The only pressure on the other side was what you would expect, improve the administration, speed up the case handling, improve what they call the import certificate delivery verification system so that you had a better way to check. Everyone agreed that the paperwork was horrible. I had a lot of sympathy for the analysts who were under the gun all the time and I had no desire to ruin their careers. Even when they wrote impeccably honest national intelligence daily briefing items, the editors often "jazzed" it up and so made them alarmist and inaccurate.

Q: This is all the great advantage of the state department is it has to be down to earth. There is not much time for any artsy fartsy.

JONES: No, I was lucky. This is not an area where state had any strong issues or sword to fall on. They had the standard view that whatever diplomatic game you played -- you needed the strongest possible positions. Trying and failing could do more harm than not trying in many cases. No one wanted to look stupid.

As a dedicated anti-communist, I was saddened to see CIA analysis weakened by the political "commissars." At the same time, the head of the Intelligence and Research Bureau at State was a WWII intelligence specialist called Hugh Montgomery, who really understood the uses of intelligence. He always backed honest analysis, even if he did not agree. Hugh Montgomery's view was you got the best analysts you could; you gave them their head; and you kept them honest. He would back you all the way. He even backed me against accusations of racial prejudice by the East Asian bureau for analyses that reached conclusions on Chinese illegal technology transfer that differed from their ideas.

Q: What was that?

JONES: They were a lot valid reports of illegal Chinese technology transfer activities which I wrote up with the conclusion that it was standard operating procedure for Chinese agents here and in any advanced country. It was no big deal- the French did the same thing here and in Paris as part of their commercial intelligence collection.

Q: Sure. I am told that if you were a businessman and checked into Paris, your briefcase if you left it in your room.

JONES: There was one case dealing with the Soviet plans to build a gas pipeline to sell natural gas to Western Europe. One of the best CIA analysts wrote a clear and balanced account which concluded that we would be unable to change Soviet plans or European desires to have the pipeline but that our adamant opposition would only kill any chances of any U.S. companies benefiting from contracts.

Q: Oh yes. This is a major contention point early on in the Reagan.

JONES: As an economist, he was able to look at it from the economic linkage view. They supply but you buy and the two of you become like co-addicts. He sent us a draft and we cleared it without any problems. But he had to call us and pull it all back and ended up transferring to another division when he refused to change his conclusions. CIA Director William Casey personally rewrote and issued it and he was wrong. It may be patriotic but it can be stupid if you guess wrong.

Q: Well did you get any feel for the hierarchy within the State Department in what you were doing. I mean let's say something on the pipeline, I mean we think it is wrong. Was there...

JONES: State can take credit for being right on the pipeline issue. For one thing State has to consider the economic side as well as the whole range of bilateral and multilateral issues. We didn't just go in to the European Union and a lot of NATO countries with just one thing we wanted. We had whole baskets in every conceivable area affecting our security, our desires for this, our desires for that. Since you can't get everything, State always had a very balanced approach and the various bureaus in the clearance process were very frank about it.

There was the time when we tried to stop the heavy water shipment going through Paris to a "bad" country. The customs agent in Paris missed the shipment, despite the intelligence we provided, because he was looking for the French label for heavy water and not "heavy water." Then we had information that it would transship Monroeville. The nonproliferators wanted to make a demarche to the Liberian government, headed by Sammy Doe but was dissuaded by the African Affairs Bureau who asked them if they really wanted Sammy Doe to shoot the plane down -- as that was his way of doing things.

People did regularly accuse each other of clientitis or reverse clientitis when they loathed the country - for example, for the North Korea desk. I was proud of the way that State held to its "big picture" positions." I was especially grateful to Hugh Montgomery for giving me a better understanding of how good intelligence works. He gave us regular lectures on you don't use intelligence as a crutch. He explained the different time lines of intelligence, such as, for example "immediate intelligence" which calls for immediate response, i.e. terrorists about to bomb train. That's the Defense Intelligence Agency type of intelligence. In the same case, CIA may have been monitoring on a longer time line and noted that certain terrorist groups had been buying explosives for the past six.

On practically my last day at INR, I attended a meeting in which the new Director Morton Abramowitz spoke to us. He did the usual administration management 101 introduction and offered to hear our views on needs, resources and actions. As I sat there and listened to my colleagues talk, I realized that he only listened enough to frame his rebuttal. I was saddened to see that change.

From INR, I went on to East-West trade at that point, but kept contact with my INR friends. I greatly enjoyed my three years in INR and was glad that I had extended a year. I had to give up Chemistry and if I had to work for State, INR was definitely the place where I felt I could contribute the most and where I belonged. I also had dealt with intelligence as a physical sciences officer in ACDA.

Q: What were you getting when Abramowitz came in. This was when?

JONES: OK '80-'82 I was OES. '82-'85, it would have been around '85 I guess.

Q: OK so this was still high Reagan period.

JONES: Yes. The actual political masters at the higher levels did not really have that much of an effect on us, except for Abramowitz.

Q: What were you getting from your colleagues on the effect of Abramowitz coming in? Was this a change?

JONES: Yes. He changed the basic role of INR. INR under Montgomery considered itself an intelligence service organization for all the bureaus, not just the Assistant Secretaries and the Secretary of State. The focus was all on getting the Secretary's attention so much blood was shed in the writing of the morning briefing. In Hugh Montgomery's tenure, we were there to make sure that the working level got as much indepth intelligence as was possible. In most cases given the nature of the material they would come to my desk and read the compartmented material or communications intelligence material.

Q: This being essentially the eavesdropping results.

JONES: Yes, and any other agency reports because when you deal with things like export controls, you deal a lot with their debriefing of U.S. citizens who have gone to major conferences etc. You had more or less a more complete picture. For example, we had a "nuclear winter" scare at the time. It took a lot of extra background to get a more accurate picture.

Under the Abramowitz regime, I understood that everyone got up practically at dawn so they could prepare something that would make the chief briefer who was Abramowitz look good with the Secretary of State. That is fine. Every head of a new bureau likes to do that, but everything else was neglected. It was sad to see.

It was easier on the science side in INR where issues were much clearer than when we were trying to determine the personal intentions of the head of the Greek government with base negotiations let's say.

Q: That is one of the things that I have noted, that is sort of natural, that overseas, I was in Greece for example. I was consul general and the stations chief, I would say something that an American came in and said his cousin was beaten up by the police, and the police were beating up people a lot. The station chief would say well I talked to the chief of police there and they said they weren't beating them up. The problem being there is something if something comes out of intelligence, a lot of this you paid for in one way or another, it sounds much more impressive than just the sort of thing you might read out of the newspaper or in casual conversation. Something you haven't paid for just out of the ordinary diplomatic reporting thing.

JONES: Yes.

Q: I am sure in Washington it is also the same principle. We have our sources you know, this all sounds great.

JONES: I can quote Montgomery. "It is the source, the source, the source, stupid!" Basically the quality of the source, the capability of the source makes a big difference. And what I found in my 25 year career at State is that I had certain advantages. You have to remember I was in the position of a dentist being put into practicing gynecology. I had an advantages by having learned to learn in my scientific career. You have a very logical structure that helps show you what you still need to know. Every problem is different. Problems don't care if you have a Ph.D. in Physics when the solution requires electrochemistry. So you look to all sources. The legalistic work at State on treaties such as comparing texts was easy to understand. Thanks to the University of Pennsylvania College for Women requirement that made female science majors take twice the number of humanities courses as in the College for Men, I had had about 12 humanities courses and had learned to write.

Writing is important in science, because you have to communicate the facts as precisely and accurately as possible, otherwise, someone following your directions could blow up the lab. So the focus in science writing is not the nuance but the facts. That stood me in good stead. The human relations skills were taught by my parents. As for human resources issues like sexual harassment, I don't remember a single instance where I witnessed or suffered inappropriate behavior. Oh sorry, there was one young man who made the mistake of asking a very attractive a female intern for a date - in the middle of the main office. She did not work for him; she actually worked for me so it was sort of a sideways pass. She asked him how old he was. He said, "32." She said, "You are too old for me." He had to hide for a week. Otherwise He and I shared an office and I found it very difficult to block out his attempts to get different women to spend the weekend on his boat with him. He would go through the little black book, and eventually it would go further and further down. Every once in awhile the conversation would penetrate my blocking efforts, but I was not terribly bothered y it. He was being a gentleman. He was trying to ask these women out, and these women were coming up with a million and one excuses.

Q: You make me feel very sorry for the gentleman.

JONES: He had his moments. He tried hard. Later he did find someone; He married happily. I think his idol, the woman he really wanted to get to know was Princess Di, but she was not available because she was a married woman.

Most foreign service officers with whom I dealt had learned that a certain amount of diplomacy and were generally tactful. Occasionally, though never in my offices, there were people that were known as "screamers." The feeling there is if you had a screamer, you also had a way to take one out. Because basically every foreign service officer is in the position of a kamikaze pilot. They may not be able to do much, but they can take out a battleship if it came to that. The powers in command recognized that. We had all sorts of terms such as a "suicide 2." or someone at the end of their career, able to retire with a pension and unlikely to go any higher. They were now in a good position to pay back any mistreatment. The behavior I saw was all perfectly above board.

Q: OK, well let's talk about some of the issues. You were, I mean this would be '80. After you left INR you went to East West

. . .

JONES: Export controls, East West. That is where I chaired a committee of warring agencies so bad that DOD sub groups would call me asking if I could disinvite other DOD people. We, they were supposed to make specific decisions at to what to do with COCOM. I had to draw on some Kung Fu strategies. It occurred to me that at all the meetings everyone had 11,000 initiatives and that this had been like this for years. Therefore there must be a lot of initiatives that we had proposed earlier. In fact they were. I went back and read through every COCOM record I could find for the three years before I arrived. I found that almost everything they came up with we had already proposed and our COCOM partners had already agreed to implement. My major contribution was to suggest that instead of proposing things, we remind people of what they had agreed to and see what the implementation was. This helped a lot and made it possible for me to actually see my children grow up. It was easier because I agreed with the goals -- which were winning the Cold War and keeping it "Cold." Once people got over various testosterone attacks, we could get the work done, because the work had to be done.

Q: What were the issues, I mean the initiatives that were agreed to and then ever effected?

JONES: Better implementation, better reporting, better control of import certification, delivery verification. Better procedures when it came to third countries.

Q: Well on this was it a matter that you all were working on it essentially trying to make a better bureaucratic system as opposed to saying we can't sell centrifuges to so and so and this sort of thing.

JONES: That part was easy once we fixed the problems of the meeting. The meetings used to run hours. I only had one hour. I figured out ways to do it. It took some extra work. Every meeting I wrote not only the agenda but I wrote a full report of the meeting right afterwards and sent it to everyone for clearance. Eventually the only thing they remembered was the minutes and the agenda. We had to have clearer lines of who was to do what. We were a working committee. We are not there making great policy. For example, we were making sure that the Cuba paper is fully cleared and ready for the delegation.

It was very much like the you plan would plan synthesis of a new chemical. You had to get the ingredients. You had to figure out the costs. You had to get the people to do their part. Then you had to test it. So, the science background did help. Science helps you move a little beyond the actual problem itself. In other words you could just sit back and give yourself a little distance, sometimes things come forward that you hadn't noticed before.

Of course I had hobby horses. I have a consular hobby horse. I had written the consular affairs bureau about a dozen times about paternity. DNA allows you to determine paternity. So a man should be able to come in and say this is my illegitimate and this child is a U.S. citizen at birth because of my DNA. After all, we are agreed on sexual equality right. Any woman who comes in and proves this is her baby transmits U.S. citizenship to her baby - why not for men.

Q: All I can say as a consular officer I am thinking oh my God it is the equivalent of typhoid Mary. There could be spermatozoa George who is going out and sowing his seed all over the place, Including by mail.

JONES: Yes. But the point is justice.

Q: That may be justice, but good God.

JONES: So I was the Typhoid Terry for this one.

Q: Well tell me though, on the personal level, here you are particularly with the DOD and a lady and a lady of Asian background and all that with your science. I would think people would say oh my God because you had babies to take care of. You had an agenda; you wanted to get it done. These meetings are designed for doing what we are doing here, talking away and displaying ego. I am talking as a guy in a bureaucracy.

JONES: Oh yes. Actually surprisingly enough I got a lot of support from a lot of DOD colonels who too had offices to go back too. What I did when I started is I said that the purpose of the meetings is to get the work done. I wore two hats. With one hat I am just the administrative person trying to get actual work out of the pipeline. I am not selling a state department position. I am going to write notes, minutes. I call the meetings. I get conference rooms. If I have to speak up for my bureau, I am going to announce that I am now wearing hat number two - so they knew exactly where I am coming from. I also recognize that all of them shared common goals. They were all patriotic Americans. They all wanted us to have the most secure export control system possible and the most efficient. None of them to the best of my knowledge wanted to see our industry, technological might or lead disappear. So we started with that.

I even had DOD agree with my view that "We wanted to send the strongest possible delegation. We wanted the A-team. We didn't want to look like asses."

One of their strategies was to pull back their clearance about ten minutes before the delegation was to leave. My response was simple "other people may have time to play these games, but if someone pulled their clearances, then we would start all over again." As DOD was usually the agency pushing the initiative, they quickly decided it wasn't worth losing the time. We had our moments. I was told later in private by one of the women lawyers that she knew I was going to be difficult to argue with when she saw me pull my pantyhose up to my armpits. I would go in girded for battle in the traditional

sense. Science and technology training actually helps as getting a whole lab team to do something isn't easy and provides much interagency usable practice

Q: Did you, I mean this goes back, but did you get any feel for the difference between sort of the academic process in chemistry let's say and the academic process in English or international relations?

JONES: Oh yes. I knew David,. Dave and I met, my husband, David, and I met in 1959 at Penn. He went on to graduate school at Penn. I met all his graduate students, and we thought at the time there were tremendous differences. Some of it was the professors in Chemistry generally didn't attack each other much. They were busy trying to get very lucrative consulting contracts. Their reputations came from where they could place their graduate students after the Ph.D. in prestigious universities. The head of the department was president of the American Chemical Society, and had patented and owned a yacht as a result of the patent. And the graduate students didn't compete against each other because basically we all had the same problems. The only way to get the Ph.D. is to solve your problem. And since many heads are better than one, most graduate groups would meet and talk over everyone's work, and then people would come up with suggestions. There was less individual rivalry. I noticed that in questions.

When you go to a Chemistry seminar the question is likely to be, "On slide three when I did that experiment, I got 5.2 instead of 5.4. Can you explain it?" But the questions were real questions, even if hostile. "I don't believe your explanation using the molecular orbital theory makes sense. I go by another theory." OK. When I first went with David to a political science conference I was in shock. The questions were longer than the speaker's speech. I mean the people come up they gave you their views. They cited their authors. I kept saying, "What is he asking? What is he asking?" I couldn't find it.

Q: Did you notice in this military approach with the military people, was there a difference between them and maybe your experience in State Department and CIA?

JONES: Yes a certain amount. What I try to remember Is that each of these agencies had different missions. Individual offices had specific missions within the agencies. So in order to familiarize myself with the portfolio, I carefully looked up exactly where each group came form and tried to get a feel for what they did in general. They were willing to explain. It gave me a chance to see what kind of views they had. The Department of Defense military and civilian components had their own specific views and missions and needs. I don't know how any ambassador survives getting a whole group in a country team meeting to agree to one single thing because to me it is like teaching chickens, ducks, geese, and maybe an ostrich or two how to tango together. But that was my view, so I felt it was important to understand what my compatriots were doing.

Basically you re dealing with groups of people with different aims. In understanding the aims. I divided the negotiations into those which turned out to be technical exercises in coming up with some kind of a framework of enough mutual benefit to stand. You would have a company that wanted to export, but they wanted the government's blessing

because they also had interest in getting government contracts and so on. You had DOD that didn't want this company to go down the tubes because they were a good supplier and a reliable supplier. You had State Department that didn't want a trade war with a trading partner. You had the military that certainly didn't want improved guns on the other side. So with all of these you could work out something.

It's different today in dealing with terrorism issues as the only solution the terrorist accepts is your annihilation. The scientific training helps in organizing the data and making sense of it. It helps you know where to start the chipping the block of marble.

I had limited overseas experience -- Brussels, Montreal, and Ottawa. I was always pleasantly surprised at how good the people were, and occasionally saddened by what they did to themselves. At the State Department itself, my experience in assignments counseling, recruiting and the board of examiners was good.

Morale was a problem and very noticeable during my time as a Counseling and Assignments officer. There was tremendous pressure. A promotion was more than a promotion. It was more than more income. It was an affirmation almost of self worth.

Q: I have found this. After a promotion I felt for a year or two a certain raising of the adrenalin or something like this, somebody loves me.

JONES: Yes, and for a science officer we are in a very privileged position. At the time I was in, we were considered a sub cone of the Economics Cone, but as a sub cone we only competed against each other. There were only 20 some science officers in the entire foreign service; therefore all they had to do was match the number of positions available when it was your turn you got promoted unless you had dome something totally awful. There was a lot less direct competition.

We are not really doing science work at State - we were translators. We were bringing to bear our knowledge in areas where a certain amount of scientific knowledge was useful. But we were not doing scientific research. In their innocence, the National Academy of Sciences have often wanted to send Science Attaches abroad. They have very little understanding of the work a Science Officer actually does. There is no such thing as a scientist, per se - there are a biologists, a chemists, genetic engineers, material science engineers, and so on. We have three daughters in three different fields of engineering.

So the vision of the actual work you do is oftentimes not very clear. As I mentioned earlier, when I first met a science counselor in Paris, Dr. Piret - I met a man who was really on the periphery of the Embassy. He was thrilled at the idea of sniffers that could detect heroin labs. When you process heroin you use acetic anhydride. The problem is acetic anhydride reacts with water becomes acetic acid which is vinegar. Name me a restaurant in the south of France that does not have the odor of vinegar around. And as a result they were able to map every restaurant in the south of France. The only analogy I could think of was the Annie Oakley system they used in Vietnam. It was a way to pinpoint incoming mortar fire by triangulation with two sensors. While it worked very

nicely in the desert in test firing; it was not equipped to handle all that battlefield chaos and noise and had a hysterical attack and broke down.

A political, political-military officer at an embassy has a very clear mandate. He knows who he is reporting to at the Department of State. A science officer oversees no specific mandate - and certainly does not do circular reporting for Science agencies -- which are focused mostly on their own research missions. Even agencies with a lot of international ties and links tend set up the links directly. As for scientific intelligence, experts in any field know much more about what their foreign counterparts are doing than any science officer could hope to know.

The Key is which agency has the lead. The political military people have their slice of nonproliferation policy, but when it comes to the actual nuclear power trade let's say, it is not State. It is Ex-Im Bank, it is the Nuclear Regulatory Commission, it is the Department of Energy. At the same time, we have to have foreign service officers who are technically literate. They are representing the most technological country in the world. There is hardly anything that doesn't have technological aspects to it. If you talk trade, let's talk broadband communications, standards, blue ray.

Q: Well this is where you say the role is really, I have never heard it before, but basically a translator, which is extremely important. To say what are the issues, and there as a scientist you probably can pick up the issues can't you?

JONES: Yes, they are very straightforward. The issues when you look at the political side of it almost always result in the effects of this technology.

I reviewed a book entitled <u>Biohazard</u> by Ken Alibek on biological warfare. It was totally chilling. It made clear that even while the Soviets were letting us visit their facilities and signing all sorts of agreements, they were also producing biological agents in quantity. The work continues as former Soviet Union scientists sell their skills worldwide. Every Foreign Service Officer needs to have a basic understanding of technologies and science that can affect us all.

We should thank Colin Powell, whose major contribution to State is making sure that every desk had an internet. There were officers who did not know how to use the internet when it had become important. Even when I was in INR, this was in the dark ages. We had something about the open flow of information and widely available data bases.

No one has any control over technical information flow. For example, when the Air Force was developing Very High Speed Integrated Circuits, they kept the program under very tight security. Then, they decided to see what was out there and paid a graduate student to write a paper on what he thought was going on in the field on Very High Speed Integrated Circuits. He just read Aviation Week and whatever other open source she could find. Even without Internet, he still found a lot and wrote up a little paper for which he was paid nicely, bought a new care and disappeared into the distance. They had to classify the paper. Because he was an intelligent engineer who understood integrated

circuits, he had come up with some really intelligence on the Air Force Program by using open sources alone.

In a similar vein, the Department of Energy at one point when we were talking nuclear controls, wanted to have a better idea of what someone could do if they couldn't have access to anything special, but they knew what was already out there on our atom bomb. Remember there is a book by Glasstone, The Effects of Nuclear Weapons. The key was really knowing that it could be done -- as we proved in Hiroshima and Nagasaki. So, the Department of Energy hired a group retired bomb hands - who had worked in the initial bomb project when we knew so little that one man actually killed himself by moving beryllium shells too close together around a neutron source. They had a lot of fun. Their first conclusion was that all this stuff on shielding for hot boxes wasn't critical, all you needed was lead bricks. You may indeed have cancer in 20 years but you'd have a working bomb. They had to classified the results of that paper which turned out to be a bomb recipe book.

David and I were able to give each other unique slants on things. You might say he was my political-military teacher and I was his technical backup.

Q: Well getting back to COCOM,

JONES: COCOM, the Coordinating Committee. It is now the Wassenaar group.

Q: Were you involved, I think there was a famous case, I want to say Toshiba.

JONES: Toshiba, yes.

O: Now as that during your time?

JONES: Yes.

Q: Can you explain what it was and whatever piece of the action you might have had?

JONES: OK, we try to detect nuclear missile submarines coming too close to our shores with something called a SOSUS line, which are sonar detectors placed about 1,000 miles out in the bed of the Atlantic. Therefore the aim of every submariner is to have the quietest possible submarine. Submarines make noise because their screws as they go through the water do something called cavitation, i.e., the motion of the screws causes little air bubbles to come out of the seawater and makes noise, but if you have a screw shaped a certain way, you cut the noise tremendously.

Q: This is the angle of the blades and its configuration.

JONES: Yes. And to make it go you need a very sophisticated precise, five-axis machine tool, I think it is about 15 feet high and weighs a couple of tons. This is not something you carry out in your backpack while you are visiting the plant. We had information that

one such machine tool made by Toshiba Machine Tools, a Toshiba subsidiary, had gotten to the Soviet Union. The Hill got very excited and some Congressmen even bought a couple of Toshiba VCRs to destroy on TV. There was talk of trade sanctions against the Japanese.

The complication however was the U.S. Army depended on a lot of Toshiba parts and even had ordered Toshiba laptops. So we could not shoot off the left foot while we were busy trying to cripple the right foot. I was in East-West Trade at the time and was handed a junior officer who was having career problems. He was very bright, very personable but had had problems while working as a consular officer in Tijuana. This could be his chance. I talked to him. The first thing I noticed was everyone seemed to know he was having problems. The Junior Officers working in the other divisions made fun of him -- almost school yard bullying.

People depend so much on their self image for their confidence, but the minute you have someone bleeding in their "amour-propre," the wolves will gather. It is an immediate hierarchy. Unless you are an old bat like I was, already armored, it can be very difficult to recover your self esteem once nicked by the efficiency report process. The other thing is that any time anyone has troubles no one looks at the system for flaws. Think, how much money does it cost to get a foreign service officer from zero to an effective junior officer. The system has spent money, so if there is any problem the system has to look at it itself for failures and not only at the failed junior officer.

He was intelligent. He understood the law. He worked very hard, and I did a daring thing. I turned the whole Toshiba-Koningsberg case and all the press releases and the write-ups to him and he handled it flawlessly. He also helped greatly in drafting comments on proposed changes to the Export Administration Act. I also had to cope with the fact that as soon as people are down, they work harder to kick you. All the cables that he wrote got turned back. I thought this was odd as they were totally pro forma cables. So I told him to write it but put my name on it. Every single one of the ones went through. Then I went to the boss that had rejected his cables and confessed that I had written them. After that he was better. I gave him an honest efficiency report. and it got him tenure. It also taught me how the system can destroy the unlucky ones and the only defense when attached is to fight back. The damage is how unfair criticism can destroy self esteem.

Q: I have always found the grievance process, you know sometimes there are real grievance issues, but people who go to the grievance and invariably they talk about their grievance. That immediately turns their colleagues off. I gets to be a distancing and wonder about this.

JONES: It's still a chance to hear the second side of the story...

Q: Yeah. Was there any foreign connection with what you were doing or were the foreigners you dealt with the Department of Defense or the Department of Commerce.

JONES: Oh we had some fun. There was also the Hughes Helicopter diversion by North Koreans

Q: Good God!

JONES: The South Koreans absolutely went up a tree, because these are the same helicopters that they use for their military. So you had the nightmare image of a helicopter supposedly from their military bombing the presidential palace let's say.

Q: The Blue Palace.

JONES: Yes, the Blue Palace. And they were very unhappy and they said so. In fact the Korean Diplomats in Washington made so many demarches against the Italian embassy in town that they were barred from the embassy forever. So he would come to State to rant against the Italians. He just had to get it out of his system. We often called in foreign diplomats to get answers as to their company's involvement in the diversion. There was a DOD colleague called Mad Dog [Mile] Maloof. Eventually the word got out I think because as I introduced him he said, "Oh you are the famous MMMMMichael Maloof." He was an Italian diplomat who had a fit because we didn't call him in to one of our sessions where we were basically yelling at them for violating this and that. But we said, "You didn't do it." but he insisted on being invited anyway. I was told by the Italian desk that was the *Italian syndrome*. Never leave them out.

Q: What happened on as you saw this helicopter thing. It sounds pretty serious to me.

JONES: It was serious. They I think Hughes paid a huge fine. Individuals who were coopted, including senior military figures in Europe provided the false trail that led to a diversion to North Korea. Eventually the South Koreans calmed down and they tightened procedures. As a result, Hughes eventually lost a very lucrative satellite contract. But I was not in it enough to know exactly what happened.

So I also dealt with foreign science counselors a lot, especially in OES when I was there on nuclear issues, and again later when I did science and technology cooperation. When you are female, Asian, and middle aged, you become harder to read. I did find it was a help to have the Ph.D., the post doc, the science credentials. It is the same principle for instance, that allowed me to get salesmen and mechanics in to treat me seriously if I had complaints about their gas chromatography instruments.

The rule is that if you constantly look for slights, you will certainly find them. The bottom line was always just getting the work done. I didn't have the time to brood over things.

Q: So I think it is probably a good place to stop now. Where are we? After you left the last assignment we talked about where did you go?

JONES: OK I think we finished the Office of East -West trade and then the Office of S&T Cooperation in the Bureau of Oceans and International Environmental and Scientific Affairs. After that I think I went to economic training after east west trade. We had had an assignment. We had already gotten an assignment to Pakistan, science for me, political military for David. Arnie Raphel knew David, wanted him but we flunked the medical, so we were not cleared for overseas assignment. Since my assignment was broken, the only place I could be put was in economic training. Which fit, because if I wanted to do anything overseas I was in the economic subcone, and to me it was a break. It was fun. I had never in my life had economics. The only economics I had was I read David's textbooks when I was desperate for reading material.

Q: Samuelson?

JONES: Oh yes. No problem. After reading thermodynamics, Samuelson was like a novel.

Q: OK well we will pick this up then when did you move to economics?

JONES: OK let me see. Was it '87 or was it '85? Yeah, It was probably '87.

Q: OK, so we will pick this up in '87 when you are off to economic training. Today is 3 August 2007. Terry, 1987, how did you find the economics course?

JONES: I enjoyed it a great deal. It was very relaxing because the beginning of it was mathematics. I really enjoyed my fellow students. We were a relatively small class, a group of ostriches, chickens, beavers - which they were trying to get to dance to the same tune. The training was very classical. The problem is that without truly in-depth training, even though you can cram in the facts, you can't cram in the critical thinking. The other problem was the mathematics was a bad fit for many economic problems. While you can teach people to do algebra and to solve calculus equations, unless they understand the underlying basis - they can easily misapply it.

Economics misapplies it regularly. But for the small range of changes they deal with, they can get away with it. But they can't get away with it whenever they deal with what you would call a shock such as a depression, a war, or a boom. They assume that things like pricing and quantity are independent variables. They are not. An independent variable in mathematical terms means that a change in one will not change the other. They are different dimensions.

It was also very heavily on-message on being very very pro-free trade. By the end of the course when we finally had speakers coming from the Chicago school to present a major non-free trade school of thinking, I was amazed to see the class arise as one in defense of free trade. They had been successfully indoctrinated. Admittedly the arguments were hit back at Adam Smith and they hit back at the concept of comparative advantage. All the comparative advantages from free trade depend on ten basic assumptions holding such as

perfect market, perfect competition, perfect information and so on. Time is not included in economic analyses except at the most sophisticated university levels.

I was more interested in the models than defending free trade. I did fine on the graduate record exam on economics and theoretically, I could have gone into a graduate program and headed for a doctorate in economics. But I also knew the difference between being able to write about something and being able to do it.

I had another problem with the Training and that was State getting its economic officers through in house training instead of bringing in "real economists" -- there is no shortage of qualified candidates with economic backgrounds who also pass the Foreign Service Test. To me any good organization that is world class should be able to bring in the skills it needed. There is a great deal of lip service about taking in your generalists and giving them a spot of training here and a spot of training there, but sometimes you do need real expertise and the Economic Training was good for familiarization but not for producing real working economists.

The only reason for having in house economics training is to equip someone to do economic work a small post along with doing other work. So I wrote an article on it for the Foreign Service Journal. I doubt the course director, Lisa Fox will forgive me. Her critique of my performance was I held them to too scientific a standard. I kept saying I wasn't holding them to standards, I was trying to explain why their standards were wrong. There is a difference.

I shared a cubicle with John Butler who was later killed in Grenada. I got to know him fairly well. He was engaged to be married. He used to refer to her as his main squeeze. He was just a very decent and unfortunate man.

Q: What happened?

JONES: There were people sent in there to inspect a police station for corruption. Somehow he got shot to death. I think one of the policemen went berserk and shot several people to death including John. I sat across from Howard Kravitz who may be the world's greatest linguistic genius. He goes down in history as a person who rebelled against middle class liberal parents in Philadelphia by becoming a bricklayer. When this wasn't enough rebellion, as his parents strongly opposed the war in Vietnam, he joined the Special Forces. Special forces because he didn't like all that army discipline stuff, but was he linguistically talented! He had four years in Vietnam going from rice paddy to rice paddy. His Chinese was superior to mine by far because he could read and write. He was married to a Taiwan Chinese. Once he got so excited talking to her on the phone and to one of his contractors - who was trying to put the dishwasher in backwards - that he started yelling at the contractor in Chinese. He later managed to pass the Japanese test at FSI with a 3 which meant ready to go to Yokohama for further training - which he didn't want to do as he was still refinishing his house, so he did a first, he protested his passing grade, which he claimed was just pidgin Japanese he "picked up." They gave up and put

him back in class. I remember talking to a classmate and asking how he was doing. His comment was, "They never shut up. He and the instructor never shut up."

Q: Who was this?

JONES: Howard Kravitz. I think he is still in the service. He is wonderful. He is brilliant. I think he has several children now. When he went into the economic training they had not no children yet. The Textbooks were fine - I mean after you have been through thermodynamics and quantum mechanics, the textbooks are very straight forward. They are mostly in English with a slight leavening of math.

Q: Well in a way looking at this, you came from really quite a different background than most of the people there. But my impression, and you are talking about somebody who got a D- in economics, and a man who later became Eisenhower's head of the office of the budget. He was an instructor at my college at the time. It was a well deserved D-. It was almost a gift. I get the feeling that economics officers really don't need to know an awful lot of economics. I mean as you were saying, if you really want economics to a certain point it moves to a level, and this isn't the job of the person back in the field to really discover. The main thing an economic officer is to get a feel for the statistics right as the information going in and be able to talk the talk a little to people who may be able to give the information.

JONES: My point that I made in the article I wrote for the Foreign Service Journal was that we were not being taught as adults. We were still being taught they way they teach college freshmen, and that you tended to get lost in irrelevant details. On mathematics it would have done a lot more good to explain to people the basics behind calculus which is it is a way of computing change. Change that follows a pattern, a sufficiently clear pattern that you can actually do a mathematical formula that relates one factor to another to predict change or project change. When they dealt with matrices, there was no explanation of the problem no one mentioned that the error range the total matrix is the sum of the error range of each element. So if you have a 1% error in each element, which is very little, and you have ten elements across, and ten elements down, that is 100 cells, plus or minus 100% range of error. To me, the great credit should go to the brilliant intuitive insights of economics in a very difficult - behavior of human groups. The important thing is how it mixes political issues, population issues, demographics, resource issues with human behavior. My special interest was still in the effect of technology and technological change.

Q: Did you find in the field as you were doing this sometimes they talk about you were saying Chicago really wasn't teaching open markets or something. But I mean did you find as you looked at this was there an approach to economics of the various approaches particularly seem to you to make the best sense?

JONES: When it came to trade, you had to move beyond the basic trade paradigms. Free trade is wonderful. Free trade does not take into account the power of one group when they get tremendous market share because of innovative and new technology. Free trade

does not deal well with technological advances. For example, to make the original video cassette recorder they took U.S. technology which was Ampex, which had a system that was \$5,000, then they put approximately 125 engineers to work on it for five years - about the same amount of effort as we did for our air defense system. They ended up with a \$300 item which gave them tremendous market share. By the time an item is cheap and everyone can make it, you can't hold market position. You have to go to the next level. Therefore government policies that protect nascent industries or nascent technologies or have unfair trade barriers are almost all designed to give their own people the lead. The U.S. did it earlier in its history. We had plenty of non free trade rules protecting our own domestic industries.

But I did want to cover one thing I forgot my stint on the FS3 to FS2 Econ promotion board during my period in east west trade. I actually wrote an article about the results of that. For once I cleared the article with everyone on the Board because I wrote it with a feeling that no one was doing anyone any favors by having a truly opaque system. In those days, we had about 2000 files to read. We were not told the number of positions. We were just told to rank the people, and then the top number X would get promoted. We had all sorts of representatives from different cones. I particularly admired one, Michael Marine who was a consular officer who did a lot of good. We had one member of the board, Tom Miller who thought only political reporting was important so anyone who had a report that said they didn't know always put in the right semi colon, he would put at the bottom of the pile. We had real battles the death on it.

For example we had a consular officer who was well overdue for promotion. He got a special commendation for thinking outside of the box in the case of an American in a Latin American country who had been lost in the Andes. They had fliers, they put out rewards and he quickly realized that they weren't getting any action at all. They couldn't afford to hire hundreds, maybe thousands of people to search, so he printed up fliers that had pictures of a pile of gold coins to whoever located the missing man. The coins were worth much less in monetary than the rewards were offered, but the pictures spoke to the villagers. Whole villages emptied out to search the area for him, and they found the guy and saved him. This, I thought was really striking. Well his self statement was truly a pedestrian list of declarative sentences. His native language might not have been English. Michael Marine said this was the type of person who wanted the next level of consular work. Tom focused almost entirely on the English style that he disliked. Michael won. We voted all with Michael.

At the time we had something called a rat file, which is a rating officer file. Occasionally you would have an officer whose record would be fine and then all of a sudden there would be terrible reports. The question was, was the officer that bad or did he run into a really strict rating officer. By being able to call the rat file, there were several cases in which the bad reports were frankly neutralized. Alas, you had a certain number of rating officers in the foreign service who believed they are God's gift to the diplomatic world, and everyone else is inferior, and they wrote the efficiency reports that way

So I wrote the article to help people understand the system. The self statement was also appropriately called the suicide box. For example, one person who had a minor little nick that said occasionally he could use fewer words in his cables, wrote an eight page single spaced rebuttal. We have never seen anyone prove the rating officer right so spectacularly. There were others lessons I learned about bad reports which I applied when I was on a different review panels. As a visible minority female, I got to serve on a lot of review panels, and whenever there was a bad report - I learned to make sure that the reviewing officer statement on the rating and rated officer was honest. If he/she did not know than they should so because this kind of report invariably ended up before a grievance panel. Truth was very important. If two people cordially detested each other or worse, it could affect the fairness of the report.

Until I served on the promotion panel, I had had little interest in the Foreign Service as a culture or organization - my focus was on the work. I often found that Sun Tzu's Art of War applied nicely to Foreign Service bureaucratics.

Q: Ok, well back to the battle. What about '88 or so where did you go from the economic course?

JONES: I think I went on, I was talking to David about it. At some point I got an Una Chapman Cox fellowship. I offered the selection committee two possible projects. One was to do a better statistical analysis on the lawsuit brought by the women officers to see whether they were really comparing like with like. Part of my doctorate was doing sophisticated no linear error analyses and I was well aware of how easy it was to skew statistical results. The adage is "If you torture the statistics, they will confess.

When I did recruiting, I also found that the best correlation seemed to between large universities, international relations and economics majors and pass rates. Since more men than women took the Foreign Service Test and majored in these areas -- it would be difficult to use the statistics honestly to prove bias against women. So I felt a real statistician could provide a better analysis. Either it would prove that the State Department had some kind of tremendous bias, or it would prove that there was not but it was an honest way to get the fact. That, they didn't want.

I also suggested something on better understanding how technology became commercialized -- crossing the valley of death between invention and market. Other countries are using national means to do it. Japan had its MITI, Ministry of Industry and Technology. The Europeans had every conceivable way they were trying to help their people over it. We were big talking about level playing fields but we weren't able to level other people's playing fields. We ended up with more innovation from universities by allowing cooperative research and development agreements. I argued that economic or diplomatic work in this kind of global technological competition meant that foreign service officers needed a better understanding of the government's role in the innovation-commercialization cycle. That, they okayed.

I also did a project comparing how other country's science counselors do their work versus how we do ours. So I profiled the ones in Washington versus what we were doing in their home countries. Let's say what the French were doing in Washington on science and technology, and what we were doing in Paris. I did interviews, sort of like your oral history, and wrote it up. The systems were very different. For example, the French use theirs for instance to seriously cover every area in depth. That means you need like 11 people for 11 different areas; while we had one Science Counselor and one junior officer in Paris. We did a lot of coordination but had little lead in any area. When our energy people want to talk to the alternative energy people in France, they often did so directly. You can be sure that someone who has spent their lives working in a specific area knows everyone in the world who is working in it.

Q: You were mentioning doing some recruiting. Looking this over, one of the things that has struck me there is this tremendous emphasis at least in rhetoric on the diversity of the foreign service, which seems to boil down to getting more particularly black males or African American males. But you know among other things you represent a Chinese, or Asian which falls into the diversity thing, but obviously this isn't your particular thing. I mean you bring up other things to it, but what about the Asian recruitment? Have you been kind of looking at this? Is the foreign service very appealing to the Asian community because you think about the University of California at Berkeley which is practically completely Asian.

JONES: Their engineering school graduation, and when I attended it to see my nephew get his degree in computer science was I would say about 55% Asian.

Q: Well is the foreign service I mean in your estimation, were they reaching out and getting a significant or a fair number of Asian Americans into it or not?

JONES: Asians were not considered the problem as very small percentage of the general population and Asians generally did well in education, income and testing. So the Asians tended not to come in via the special minority target recruitments. They passed the written. I was a member of the Asian Pacific American Federal Employees Council and Cora Foley, a friend headed APAFEC. The biggest thing was that we had wonderful luncheon meetings where people could gripe about how hard it was to be noticed by anyone as we troubled no one. We were a "model minority."

Q: I was going to say the food should have been great.

JONES: Oh it was absolutely. She had a group of Filipina grandmothers who were tired of retirement and started a catering service. Every time we had Asian American week, they would have one reception and she would call in these women. They even catered one on the hill -- something that would normally cost \$15 to \$20 a head and they managed a legendary feed for about \$5 a head. But yes, we had job fairs; we talked to young people, but there was a bias certainly among Chinese and probably among Koreans towards science and technological careers or medicine or law. It was back to the theory of the steel rice bowl. To do well in your new society without political clout,

without huge numbers, the only way was to use education. Asians were not in a position to provide the political structure that allowed Irish groups to move up in Boston.

There was no way they would let a Chinese be a policeman in a borough in New York in those days. But you can make it through medical school, and someone who needs stitches is not going to care what you are, especially if they are aware that you had gotten there by doing well.

I had no bias problems through high school because I had other Asians who had already fought and won these battles. A Chinese group that a Nobel Prize dealing with parity principle just after we arrived in the U.S. When we arrived in the U.S. in 1950, I met a woman who was part of the group. She was a skinny little Chinese woman who said in her day you had to give up on marriage. After she looked at all the men she could have married years, she decided she had made a better choice. It was physics or making dim sums by hand for lunch.

We did do one thing that showed something that I thought was much more important. We did a survey of the educational attainments of the civil and foreign service award winners and compared that with the educational attainments of blacks and Hispanics. The minority group members were the most surprised to find out that their educational attainments were actually higher. They had internalized the idea that they only got where they did because of affirmative action. There were more masters degrees; there were more extensive additional training. There were more law degrees. This was an image and a bias that had internalized itself in the minority group.

So I thought that was one of the things that showed the true harm that can be done from well meaning "helping hands." Once you are not dealing with things like patenting new polymers, being able to catch a football or to win a race, things that are provable, people were denied a chance to have real confidence in their real accomplishments. No one can argue that Michael Jordan wasn't a good basketball player because he was given EEO treatment. You could see it or you could see that Wilma Rudolph won. In fact, some of the most successful black officers went back and took the written exam just to prove they could do it. I think Ambassador Perkins understood that and that was why he insisted that everyone go through the written test. Everyone has a right to dislike for himself alone.

Q: OK, you got out...

JONES: Econ training, the Una Chapman Cox fellowship.

Q: What did you do after this?

JONES: Oh I wrote a fair number of papers on the venture capital, the effects of computers and information technology and on the effects of university technology transfer agreements and Cooperative Research and Development Agreements plus the big paper I did on science counselors. I used the Una Chapman Cox to properly wire my basement with fully grounded plugs, double the amperage going in. I had a fax machine. I

had separate phone lines. I did a spread sheet of the expenses and used a specific credit card so that there would be no misunderstanding. I know they don't require the reporting, but I just felt more comfortable that way. It was a wonderful time. I think I published things, I think I even published an article called, "Thoughts of a Wandering Recruiter." I did a recruiting session at UCLA and funded a brochure for OES to explain its functions for their public affairs people. In fact David had a Una Chapman Cox fellowship before I did, but fortunately, it didn't count against me when they reviewed my proposals.

Q: I was going to say you and David seem to have the virus. You can't help yourself. You write articles all the time.

JONES: Well he does. I sent you right a way by E mail an example of what we do for the National Council for Advanced Manufacturing. I do all the research and the first draft, and he puts it into much nicer form. It was a great way to use my Foreign Service reporting cable training and the discipline that comes of meeting deadlines.

Q: Oh absolutely.

JONES: I even used my Foreign Service training skills to edit my daughter's Ph.D. dissertation, which was on calcium ion channel mechanisms. She got her MD and PhD in bioengineering from Hopkins. I thought the work was proof of the existence of God as nothing that complex could happen just by chance. I had to read three textbooks and about 50 articles before I could understand what she was writing. In the end, I only fixed some punctuation.

Q: Well then let's keep moving on. Where did you go after the Cox?

JONES: Ok I went into French language training, because the State Department had changed its rules. I had passed out of the language requirements with Chinese by of course, I achieved a 3+ because I could not discuss nuclear armistice in Chinese - my Chinese vocabulary being more suited to "How do you want it stir fried?" I was practically illiterate, but by memorizing about 1000 characters I made it to survival level. I had done all my consular work on my 2+ and 3+ in French. Now I had to get properly certified by FSI as having achieved at least a 3/3 in one language. So they gave me six months after which I was to go to the board of examiners. I went into language training for real this time. It was interesting. I had learned French from the written side, so I could write it, but speaking it was a different story. They were very good in understanding the linguistics.

We had a wonderful instructor called Solomon Atalie who was from one of the African countries and had to learn the French himself once so he understood the process a little better than people who just spoke it well. So I completely ruined the schedule by making it to 3+, 3+ in three weeks. I still wonder if they tricked me. Talking to the instructors I once made some kind of crack about taking it easy and really learning it well as I had months and months and finally I could learn French properly. I could always flunk if they tested me too early. A few days later, they told me they wanted to give me a test session.

People went through proto, not real test sessions all the time, so I went through it. I did all the things they required. Then they asked some questions on Henry IV and I had a lot of fun describing Henry IV and his bed hopping habits and his disdain for too much bathing.

Q: I didn't know he bed hopped.

JONES: He had a lot of other interests in life believe me, and his wife often objected strongly to the fact that he came in booted and spurred and unwashed from having been on the hunt and would head for her bedroom. She was someone who believed in perfume and personal hygiene. So I passed before the Board of Examiners (BEX) was ready for me. Fortunately, FSI was able to have me read and discuss enough books and such to keep me occupied till I began at BEX.

We had one missing link. Students were tested. They had paragraphs in French, and then they were supposed to translate it into English as well as discuss in French the common links between the paragraphs. I realized students never got a chance to practice what they were going to be tested on. Also some people read slowly. I am a very fast reader. So I spent the weeks going through all the French magazines and newspapers pulling out little paragraphs and doing up a big book of possible test material that students could use for practice.

Q: I wonder could you describe how the board of examiners as an examiner worked at the time you were doing it and your impressions of both the system and the candidates.

JONES: OK, we will start with the structure. We went out in teams of six examiners. Given the results of the lawsuit and the need to make the examination gender and race neutral, only four people were active during the examination process while the other two would only be brought into play for the people that passed. Those two were the only ones who had any idea of the records of the examinees. For the others we graded the essays that the candidates without seeing the candidates and they were never the ones you were assigned to test in the morning portion. For the essay, they would pick a topic and write (without word processors or computers). This is probably totally changed by now [2007]. The idea was to see their argumentation. The topics were popular ones for the day, such as gun control, education...and so on. We would then grade it on a scale with a certain number of points for the grammar, the structure, the logic. Several examiners graded the same essay. If they could not agree then a third examiner was told to read it and they had to abide by the third examiner. Very rarely we had fights over it - but we had several African American examiners who we eventually nicknamed the hanging judges three, because they were so strict on spelling errors. Others were much more relaxed about bad spelling because we figured that was something that was easy to fix, whereas the inability to write a complete sentence was more serious.

We only saw the whole group in the afternoon exercise, when judged the group exercise.

The morning oral portion was role playing (including having the candidate execute a demarche and write a "reporting" cable and asking how the candidates would react to

some hypothetical situations which were designed to elicit the candidate's reasoning and decision abilities rather than to elicit a "right" answer. For example, the examiners would ask "What would you do if you were the only consular officer at a post and there was a crazy American woman there having hysterics, and they were getting ready to close the airport and, and, and so on. To make it fair, all the candidates were given preparatory and explanatory material before they were tested. We provided the knowledge and we wanted to see how they would solve problems. People could pick their area.

Let's say you could pick trade. The trade that person could end up with a rice demarche. They would be given a piece of paper explaining that they were supposed to present a demarche to two foreign government officials, the minister of trade and the minister of agriculture-played by the examiners. They were given talking points -- just a few to make it easy to remembered. Afterwards, they were supposed to write a short reporting cable about 300 words. To be fair, we would try to keep our replies within two or three very clear points. And they were allowed to provide a recommendation or whatever comments they wanted to make to show their thinking. They were allowed to take notes although it was generally much more impressive if they didn't.. We had a big playbook for all the subjects.

Minority candidates had all passed the written and their biggest obstacle was probably "the hanging judges three" who felt strongly that you weren't doing anyone a favor to bring in someone who couldn't do it.

The afternoon exercise is a group exercise. The candidates are told in the morning briefing what the procedures are. They were given material and told their functions in the group "country team" exercise. Each person being given a project with a specific pot of money. In the first round they would make the best arguments they could for their assigned project. In the second round they are told that only half the amount of money was available so some projects would get cut. All six candidates, and there are six candidates, could win. I think the highest number we passed was five at one point in Chicago, because they could showed they could work together to achieve the best result for the U.S. government. Allowing candidates to work together to pick the best project evened the "playing field" on the quality of the projects.

For example, when it came to push to shove the candidate could back the person who had a much better project, let's say to refine water for village X. Once you had that, you could then work out something, so that in the end all could present a viable financial plan that met U.S. country objectives. Candidates were warned not to lie

In many ways, too much depended on the specific group dynamics. We had one group session in California where two extremely aggressive women lawyers took each other out. They were so difficult, so nasty, so unfair in their tactics that they were eliminated instantly; and a young man - who was wearing a suit that probably belonged to his grandfather - spent all his time trying to make sense of things, to negotiate, to make peace and to get them to work together- he passed. The frightening thing is if we had only one

of the lawyers, all of these traits wouldn't have shown, and she would have been in command, an instant leader, and would have passed.

Q: Well the chemistry is there and it changes all the time depending on the group.

JONES: This was the way it was when we traveled a lot. I lived out of a suitcase. I think I did San Francisco, Los Angeles, Dallas, and Chicago. At different points I think it was Los Angeles and Dallas were back to back. Texas was a lot of fun. That was the only time we had nuclear war threatened on the rice demarche.

Q: What was your impression of the people produced by the written exam, the people who appeared before you in general?

JONES: The ones we saw, men, women, all sorts of backgrounds, older, very young, very bright, generally well spoken, good oral skills. The written skills were much more of a problem. We had people who had gotten doctorates and masters degrees who were unable to write 500 words - though I think they could have written 50,000. There was one that was written so badly that we actually had an argument on what topic they were going had picked. We had some who showed a lack of logical thinking. In other words they couldn't seem to go from point A to point B. They went from point A to point X and then back to point G without any way to track why. We didn't mind going in strange directions so long as the reasoning was good.

I thought they were very good. At the same time as someone who had been in the service for awhile by then, and had known really top people, I felt they were not as good at the kind of original thinking that I noticed in the top people. The test system seemed to be skewed into locating smooth obedient competent diplomats rather than original thinkers.

I knew David's peers who were doing arms control negotiations like intermediate nuclear forces negotiations (INF Treaty). They had to command a huge range of political military knowledge as well as understand the technical underpinnings. No amount of treaty writing could change the fact that missiles exist and subsonic missiles and cruise missile with terrain confirmation capabilities could go a long way without detection. A submarine launched nuclear missile would only give 19 minutes of warning before hitting the Continental U.S. This required more original thinking - which the team had under Ambassador Mike Glitman - than the candidates we saw.

But this was only my personal experience, others did see stellar candidates. Those who passed were all races, creeds, and ages. We did have one case of fraud where there was a ringer. He had flunked an exam before and the person who came in under his name was recognized by the examiners. We had one who was crazy and who was so disruptive he ruined the chances of the other test takers. He was fully delusional, almost violent. He could have been violently aggressive except that he was a little guy and there were some very large males and females in the room who would have subdued in no time.

We had a crazy female at FSI once. She was incredibly argumentative and irrational during the group exercise. We decided she was also ready to nail the mail examiners with a harassment complaint at the exit interview, so another female examiner switched with the males assigned to her to defuse the situation. In the exit interview we would explain why a person didn't pass and it took a lot of tact and compassion. This woman threw an absolute fit during the exit interview and finally managed to see the head of the Board of Examiners, borrowed \$20 for a taxi and was never seen again. Passing the written exam is no guarantee of sanity. There were funny moments. We did a security oral examination where an attractive African American woman with a degree in accounting had applied to work at State. Somehow she ended up in the security oral. When we did the exam and asked her would she be willing to use a weapon in order to accomplish her mission to defend her target, she said, "What are you asking me that for? I just want to do some accounting." We knew there was a glitch, but had to continue with the test. So, we asked her what she would do if someone handed her a package ran away while she was on guard duty for a foreign minister. She said, "I would run like hell." We did make sure her application went to the right office.

Q: Well then after you have finished this where did you go?

JONES: OK, then we had the assignment to Canada which in itself was quite a job because we are a tandem team. Our medical issues were past. Dave had long since resigned himself to having his career end because he had not been overseas for years and because he chose Arms Control as his specialty. It takes 10 years to get the expertise to the level that you need, but it is considered a career dead end. He wanted to work with Mike Glitman who had been his supervisor in Paris and whom he tremendously admired. Then the incredible happened. They succeeded in their negotiation of the Intermediate Nuclear Forces (INF) Treaty and the entire team was rewarded with promotions. David made it into the senior foreign service which made us a true assignment nightmare. Dave Wilson was our CAO Career Development Officer and also struggling with the final stages of cancer - which killed him. We were truly grateful for his efforts and he came up with assignments to Canada - Montreal for me and Political Counselor in Ottawa for David. Though Canada is not considered a fast promotion assignment as no one sees it as a very challenging assignment. David loved it. After our retirement in 1998, he continued writing about Canadian issues and has done at least 100 articles for the Hill Times and a dozen for McGill University's Policy Options. He and a retired Canadian Member of Parliament wrote a book, Uneasy Neighbors which was just released by John Wiley & Sons (September 2007.

Q: So you did Canada from when to when?

JONES: '92 to '96.

Q: OK, you were in Montreal and David was in Ottawa.

JONES: I was in Montreal for two years and when the science counselor retired early, and the position opened up in Ottawa just at the time my tour finished in Montreal, they

did an inter-Canada transfer which worked very well. In Montreal I worked for Consul General Susan Wood as the deputy in and main reporter in everything.

Q: Who?

JONES: Susan Wood. Roberta Susan Wood. I can't remember. I enjoyed it a great deal.

Q: All right, let's take Montreal from 1992 to '94. How would you describe Montreal sort of politically and economically vis a vis the rest of Canada?

JONES: It was truly two solitudes, that was one of them. This was at the peak of the discussion. The Meech Lake Accords on which Mulroney had staked his prime ministership on had collapsed when one of the provinces said no. that was it. This gave a tremendous boost to the Quebec Sovereignists who played the refusal for all Provinces to agree to Meech as proof that the Rest of Canada didn't want them. The Canadian government then something called the Charlottetown Accord which was also failed. I did all the political and economic reporting. I did a lot of "checking the box" items such as reading the Pequiste (Parti Quebecois or the Separatist party) platform. Oddly enough I also advised David who was the political counselor in Ottawa, but my efficiency report was reviewed by the economic counselor

I made a many of friends, and I joined one of the last remaining North American salons in Montreal run by a David and Diana Nicholson who held an open house every Wednesday Night for discussion. So, for the price of one bottle of wine I would get the kind of intelligent and in-depth discussion from prominent Montrealers that no amount of diplomatic entertaining would get. It was all off the record, and I kept it that way.

My focus was on Quebec's position in Canada. There had already been an exodus of Anglophones from Quebec when Rene Levesque, head of the Parti Quebecois, had become premier. I was tremendously impressed by the civilized way tone of the debate. While other countries had violent separation debates, for the Canadians it just meant longer discussions. I went to separatist rallies in which I was immediately spotted as what they thought was a Francophone Allophone and practically loved to death by various Sovereignists who wanted me to feel welcome. I had more bad coffee offered to me and thought sure my kidneys were sure to go. Some would even translate from the Quebec French into French French for me.

Q: At that time how did we view the Quebecois separatist movement, and how serious was it for Canada? And I am looking at this what would this mean for the United States? I am trying to capture this.

JONES: Well one thing that was particularly of interest. A man called Jean-Francois Lisee had written a book called Eye of the Eagle. Using freedom of information material he got on our writing from Canada during the period at which Rene Levesque had been elected premier of Quebec. All the analyses in it were very high quality. The point however is that this high quality work was produced by Americans who were not Canada

hands. We don't have Canada hands. They were professional foreign service generalists who did standard political analyses. They called the results correctly. But while we were doing all this correct analyses, in Ontario, which after all had co-existed with Quebec all along, all the pundits, all the Canadian policy experts were wrong.

The fact that they could be wrong meant that there was a tremendous divide. My point when I talked to various businessmen was that both Ottawa and Quebec had such bad debt situation at the time, in case of separation, both would have to collude to assure world financial markets. The U.S. tried to help in the 1995 Referendum in Quebec and slightly modified our mantra (we preferred a strong, united Canada). Instead of gratitude for this, we had newspaper editorials (especially out west) suggesting that the U.S. butt out. U.S. business men assumed that if a separate Quebec wanted them, they would have to make it worthwhile.

Q: Had the ambassador said something that...

JONES: Later yes. That was after I went to Ottawa.

Q: But that was the time, were you there during the referendum?

JONES: No, I was already in Ottawa then. It was a curious situation. I was David's Quebec eye basically. My biggest contribution was suggesting that the Embassy pay attention to Lucien Bouchard, who was head of the eight member Bloc Quebecois, and a nobody in Ottawa - though later he became Premier of Quebec. I also urged him to contact journalists, some of whom were superb analysts - one of these, Chantal Hebert remains a valued friend today.

Q: Well let's go back to Montreal. How did we view the situation there at the time you were in Montreal. Did you see this as potentially ripping Canada apart?

JONES: No, our figures didn't indicate that nor did U.S. debt rating agencies. They saw it as a chance to make money. Financial markets react ahead of the event, so when the event doesn't happen, there is a bounce back. Therefore there was a 25 to 50 basis point difference between Ontario and Quebec debt. The U.S. anticipate a Cuba of the north. We were just seeing it as all right, this is something Canadians have to handle. We got the most complete picture by talking to all sides. For example, when I had a project on strategic anti-submarine warfare, I talked not just to anti-submarine warfare people but to all the Submarine hunters as well to get a more complete picture. But the experts saw even for separation was protracted negotiations and at worst an economic hit of a drop of three percentage points in GDP for a few years. The key was no violence. Quebec has all the resources you would need for a country. The Parti Quebecois platform was very much a social democratic type of program with some trade and business friendly aspects. Francophones are still 80+% of the population, but they saw the Anglophones as a necessary asset, especially in the financial sector. For instance, once at a Nicholson Wednesday Night soiree, someone asked, "Hey, how much to you manage?" I think the total for that evening among attendees was about \$9 billion dollars.

Q: These were Anglophones basically.

JONES: Mostly Anglophones with some federalist Francophones. There has been serious intermarriage for years among all the groups.

Q: How did you find the sort of the intellectually community there. I am aware of some of the films that have come out of that thing the wives of

JONES: <u>Barbarian Invasions</u>. is a movie I would strongly recommend for anyone who wanted to get a feel of Quebec views.

Q: <u>Barbarian Invasions</u>. Anyway I had the feeling that there was quite a chattering class of French intellectuals who didn't seem to go anywhere. Was this important, and how did you fit into this?

JONES: Well I chattered with them. The Anglophones had certain very specific interests and concerns. Both sides did much navel watching, *nomrbilism*. It is a smaller pond so people could make bigger waves.

We did meet the number 2 of the Parti Quebecois at the time, Bernard Landry. [Later, he became the head of the party and then Premier). He, in fact, invited David and me to one of his little yacht trips on late. We had a chance to talk. He was a trilingual economics professor and also a dedicated Sovereigntist. You could see that he felt that there is a potential destiny for Quebec as a country with very close ties to Canada but only if the people were willing to make some sacrifices for a few years. Then they, would, forever be able to protect their own culture. Their culture is not French culture by the way - it is a very distinct North American one with roots in 17th Century Brittany, Normandy and France. My feeling was that if they achieved independence, then France would step in - Canadian relations or no. But there was never any intimation that the Parti Quebecois would support violence. Everyone had horrified by what had been done by the FLQ in the 80's and by Trudeau's imposition of Martial Law..

Q: This was a series of bombings.

JONES: They killed someone. They kidnapped two people and murdered one of them. Pierre Trudeau is not the popular icon in Quebec that he is in the rest of Canada. They saw his attempt to force all Canadians to make Quebecers feel at home all be becoming a bilingual country as not protecting their culture in Quebec. In fact Quebec used a notwithstanding clause in the Canadian constitution, the repatriation of which did not have the Quebec Premier's agreement - so the repatriation was considered a betrayal and was called the night of the long knives. Quebec and Ontario are two groups who have wonderful command of each other's dental nerves. They know exactly how to lift an eyebrow to give someone in Ontario heartburn. The same goes the other way. The same between the Anglophones and Francophones.

Q: did you get the feeling that this was Ottawa versus Quebec, and the western provinces were doing their thing and it is a completely different world.

JONES: Except for the national energy plan, which was known as destroying the patrimony of the western provinces to give cheaper gas in Toronto. There were Quebecers who told me they had lived in British Columbia and there had been serious bias against them. One had been beaten up at a bar. So there were things the Canadians didn't particularly want to face. As an American I will say that in Quebec I found less of the knee jerk anti Americanism.

Our daughter Margaret, went to High School for two years in Ottawa -- Lisgar Collegiate. She finished three years of their program in two years so and was able to graduate with her friends. [High school is five years in Ontario]. She faced a fair amount of anti Americanism. She was 5'2" 100 pound Eurasian who certainly wasn't threatening. is She said in teaching and in classes, they made a big thing about the fact that we attacked Kingston, Ontario. Her comment to the teacher was that Canada was British North America then and it was the War of 1813. We never went to war with Canada. They also sacked Washington D.C. - so it could be considered even. She ran into this constantly. They would have biases on what they felt Americans were like.

For example, the school paper, <u>The Lisgarite</u>, had to go to the PTA for money- they needed about \$250 Canadian dollars. She was editor of <u>The Lisgarite</u>. This was at the time of the 150th reunion. Alums were all over the halls, but <u>The Lisgarite</u> staff were told that to sell copies of their anniversary issue from their office which was in a dark corner of the school basement. Margaret looked and she said, "This is dumb. All we have to do is walk to the alums." So they each grabbed a stack of papers, went to through the school and earned hundreds of loonies in an hour. She was then reprimanded for acting un-Canadian. No matter how much things look alike, Canadians are different. Quebecers didn't seem to have this defensive anti-American attitude as they were much more secure in their identity. They didn't have to trash us to feel more Canadian. My husband's book <u>Uneasy Neighbors</u> made this point in detail

Q: Well the anti Americanism has always been generated essentially from Ontario which was the residue of where the loyalists ended up, a certain amount of the loyalists ended up We fought a little war around there in the war of 1812.

JONES: We went to Halifax. We went to New Brunswick. We went to Prince Edward Island. You could see an incredible number of little communities with plaques honoring the American Loyalists as founders. But there was much less of an anti American undertone in the Atlantic Provinces. Again, I think they are very secure in their own identity. Identity Security is the key. A Swede is a Swede. They don't have to trash Norwegians to feel like a Swede. Those that don't like Americans, don't like Americans for other reasons rather than to affirm their own identity.

Q: You moved to Ottawa and you were there, did you find the view from Ottawa different or were you sort of the Quebec watcher in the embassy?

JONES: No, I was now an economic officer, so my focus was much more on economic issues. Then it was all science and technology on which we had enormous levels of contact. Canadians could bid for our government contracts; for U.S. funded government grants and did so with good success. We did have a scandal that started in Quebec where a Quebec doctor who was part of the national cancer and bowel study faked his results. His lab made an error and turned in something to NIH that said false data. He was reporting on patients who had died as if they were alive because he wanted to continue his access to getting Tamoxifen which at the time was used to treat aggressive breast cancer. He felt the NIH guidelines were unfair so he decided to get around them by lying about his patients which probably killed a good number of his patients. Curiously enough his name was Dr. Poisson, and the manager in the states was Dr. Fisher. The issue was that the NIH folks who came to investigate didn't bother to tell the embassy. The science counselor at that time, Tom Wajda, called me to tell me to tell them that "Without formal permission from the Canadian government they couldn't take any information out." So we had to backtrack to find the NIH people. He was able to locate someone in the medical research council in Canada - who had every reason to help as we funded 15% of Canadian medical research purely through their success in getting NIH grants. Dr. Poisson was offended by the NIH protocol which denied entry into the study for any woman who had cancerous tissue in both breasts since that meant the cancer had spread and she needed more than Tamoxifen. He lied. They died.

Q: What happened on the investigation?

JONES: Well first we had tons of lawyers come calling us saying they would be happy to represent NIH when NIH sued. We talked to NIH, and they were thinking seriously of suing because it cost a lot of money to dig the data the doctor had turned out of the results. They were going to leave it to the Canadian authorities as to what else was to be done to the doctor. I was amazed that none of the patients or the families of the deceased patients sued. We explained t to NIH that suing the hospital was probably not a good idea because they were already down to their last cents and had patients in the hallways. Barbarian Invasions did not exaggerate.

Q: Yeah I mean you had somebody, I mean patients routinely sent to the United States for treatment and others, I don't know about the unions, but it appeared the hospital wasn't being used, This was a movie <u>The Barbarian Invasions</u>, the hospital wasn't being fully utilized because the unions didn't want to work there.

JONES: Well they had all sorts of things. In order to cut costs they let a whole lot of nurses retire early. Well there are only some ways to cut costs when you have a system that does not allow a private sector. The ideal of free universal health care with the government as the only paymaster sounds lovely. In actual fact with limited resources and a cap on what doctors can earn, it means rationing. One of the Canadians who worked at the consulate general had coronary artery blockage. He was only 67 years old. He was put on a waiting list. Six months later he was still on the waiting list when he died

of a massive coronary. We had a friend in the states who was diagnosed with a similar condition at the same time and he got his bypass surgery in 24 hours.

Q: Well I went in to have a routine angioplasty about a year and a half ago. They stopped looking at me after about 15 minutes and said, "Well you are going to have to have a triple bypass, and we can either do it today or tomorrow." Well I had it tomorrow.

JONES: Yeah, and there is a reason for it.

Q: Yeah they said this is what is known as the widow maker type of thing.

JONES: Yes. It is much easier. The doctors care a lot about their batting average or success rate and its much easier and safer to do the surgery before the heart attack. You don't have the scar tissue. You don't have dead cardiac tissue. So they fix it, and your heart retreats back to what it was before you had the blockage. Dealing with the Canadians as Science Counselor was a lot of fun. I also had the responsibility for International Joint Commission which was managing the Great Lakes under the U.S.-Canada Boundary Waters treaty.

Q: How did you feel about God I can't remember the name, emission, exhaust or something.

JONES: Oh there are two different philosophies on environmental controls. We are extremely legalistic. We battle to the death over the actual levels, every group screaming and yelling, and finally we have a standard set. Then if you violate the standard, we really get you. EPA actually has the right to put a city that violates the air quality standards under some kind of draconian extra regulations. We fine companies incredible amounts of money when they violate it etc.

The Canadians are different. They set an extremely low standard that the environmental groups can only dream of achieving in, but they don't enforce it. The standards are set by the federal government. The implementation is by the provincial government. For example, the St. Lawrence River is polluted despite being very fast and efficient at getting the pollutants out to sea. Their regulations say that a company that dumps in the municipal water supply, which then goes into the St. Lawrence is not considered as dumping into the St. Lawrence. For example, let's say I make titanium oxide paint and create all sorts of nasty stuff. I dump it into the local town's water supply, sewage supply, and they dump it into the St. Lawrence. I am not covered. I have not dumped into the St. Lawrence river. A few times they have caught a titanium oxide plant dumping directly into the St. Lawrence River, and they fined them I think \$10,000 - not even a wrist slap.

Air quality depends often on which way the wind is blowing and who has more cars. We and they both have problems because they allow additives that we don't. I think MTBE (methyl tertiary butyl ether) is an additive they use because they think it makes the fuel burn better in the winter time. We see it as a bad additive, so it is banned on this side of the border. There are never ending border issues.

For example, there is the example of Devil's Lake for instance in North Dakota which feeds into the Red River which goes into Manitoba and eventually Lake Winnipeg which supplies Winnipeg's drinking water. It also regularly floods. There is a long history of problems in trying to keep the flood waters on the other side. They built a barrier, we tried to dynamite it. The lake waters have been rising since the 1940's and the whole area has been flooding. The town of Devil's Lake used to be ten miles form the shores of Devil's Lake and right now is right on the shores of Devil's Lake. N. Dakotans wanted breach the lake to pour the extra into the Red River. The Canadians said no unless we pretreat the water so that it is potable. Plus they worried about alien species introduction. Our people were beginning to make noises about dynamiting a breach anyway. Unsaid in all this is that the Canadians already have thoroughly polluted all the water going into Lake Winnipeg drinking because of runoff from the farms. I believe that the argument will continue until a major drought when both sides can fight on water allotment.

Water level management is another issue as the St. Lawrence Seaway requires the Great Lakes to provide enough water for ships to move. This occasionally means that the Thousand Islands area becomes the Five Hundred Islands.

I also worked with the Navy Attache by providing technical advice on the potential of CANDU (Canadian Deuterium Uranium) reactors to burn Soviet weapons plutonium.

Q: OK, well probably this is a good place to stop. You left what happened then?

JONES: After we left Canada I came back to counseling and assignments in the State Department doing a CAO's work. I planed to retire when David did which was 1998. Before I retired I worked as a Counseling and Assignments Officer and learned much of what I should have known years earlier. Someday Dave and I hope to write a book on the inner workings of the Foreign Service. Both David and I have published articles on the Foreign Service over the years. One that I did was always rejected, though I thought it made some good points. My view was that the system is at fault for the abusive people in at Embassies and at State. They deserve the dysfunctional supervisors they get because they never seriously reflected in efficiency reports. I know of one case where the Administrative Counselor was pulled out of a post after a No-Confidence Cable from the Ambassador. He wrote it because the entire section threatened to resign if she didn't leave. Yet, the efficiency report on her said absolutely nothing about this. Good management means preventing abuses.

Q: Well I am just thinking again if you have any thing from your experiences particularly if they pertain to actual cases you can add that to this.

JONES: Oh yes. In the science work it was very straightforward. I did have one fun case, not case. The head of the international joint commission came to Ottawa, our person, Tom Baldini he had a very unique problem. The Clinton appointees to the International Joint Commission were all experienced environmental types, very collegial, and competent. Two were women who were tops in tact and expertise. The Canadians were

also named some stellar people. One was a world class whale scientist from Quebec. One was a very prominent Liberal-Party connected senior lawyer from British Columbia. They balanced geographically. One was an environmental activist from Ontario. Alas, the Canadian side went to war with each other as the female head of the Commission from Ontario was extremely sensitive as to her perks and refused to accept the other two as peers. But, they were not people you could order about. So our people were unable to determine what the Canadian position was, because they would hear one, and then they would hear the other, and then they would hear the third. Baldini was in a position of trying to deal with warring relatives. So he said he wanted us to know so we could at least let the Canadian Department of Foreign Affairs know. He didn't want to go directly to them because that wasn't right in the chain of command. So, I wrote it up and faxed it to my contact. I sent explained the discord problems carefully in neutral terms and within minutes, I had a phone call asking me to classify it. Someone listened because eventually the difficult one left and her replacement had no problems. Apparently the last straw was when she insisted on some ministerial privileges that weren't appropriate. I saw her in operation and found her to be very bright, very dedicated, and with no people sense.

Q: Today is 10 August 2007. This is an addendum to the oral history tapes that Terry Jones and I have been working on, and so I am going to leave it pretty much to you to kick this off, the things we left off the last time where you memory failed you. We left off a significant hunk.

JONES: OK, I will start with after economic training.

O: This is when?

JONES: OK '85 to '86 is when economic training. Then '86 to '88 would have been science and technology cooperation, office of Science and Technology Cooperation in OES. It was basically one of the traditional science counselor, science counselor wannabe positions because the office dealt with science and technology cooperation agreements with the world. The State Department has prime lead in something called the umbrella agreement, the agreement under which all the individual agreements say energy researchers, health researchers with their counterparts takes place. In most countries there was not much problem until we decided that we needed to cover the intellectual property rights that might result from the cooperation. The intellectual property rights would be covered in an annex to the main agreement. It was long, legalistic, and covered every conceivable type of discovery and invention. There was a fair amount of opposition from the various scientists as basic research almost never resulted in intellectual property. If a U.S. government entity were involved on the one end, the intellectual property belonged the U.S taxpayer and not the Agency.

I could very easily understand the basic reasoning on protecting intellectual property rights. I had after all had a summer job at American Cyanamid examining Japanese patents and looking for usable loopholes. However, the real problems with intellectual property rights were things more related to outright theft, counterfeits, and so on. On those, USTR had the lead and worked very hard, not too successfully, because the

governments either colluded or they were unable to stop the violations. So science and technology agreements were an easy target for bureaucratic triumphs. To give you an example on how this was received, we went to the South Koreans and said, "Here it is." They said, "What are you going to do to us if we don't sign on?" Well, we weren't going to do anything. We have a very open system and they were already doing all the research and cooperation they wanted to do in the U.S. Then they said, "Well what is in it for us?" And there wasn't special benefit to offer either. At this point they said bye bye Charlie. In fact I had charge of the Asia, India, Japan science and technology agreements.

Q: That is where the real action was anyway wasn't it?

JONES: State was not in a strong position, While the scientists knew was they could live perfectly well without State we couldn't do without their support. I loved the office. My colleagues were wonderful. It was my first experience with AAAS fellows. The American Association for the Advancement of Science had fellows in the State Department to give them exposure to policy making, international science and technology. It was easier to teach them diplomacy than to teach a diplomat the science. It was very glamorous for them, and since I jet lagged horribly, I was the one supervisor who was willing to send my AAAS fellows out with delegations instead of going out myself. Instead, I served as the 24 hour backstopping person.

I may also have been the only person who recommended against breaking up the office into divisions. It may have made me a division chief, but I thought that any organization where an office director and a deputy director could not manage nine people was in serious trouble. If they had to have three divisions to add three division chief positions, State was in sad shape.

O: 1989.

JONES: One of them in fact we teased a lot because she decided on a bicycle trip in China to go with her China visit. Just at the time Tiananmen Square took place. The National Academy of Sciences and the U.S. Science Agencies worked closely with the Chinese science community to help any U.S. visiting. There were a fairly large number of Chinese Americans there under t cooperation agreements and the soldiers firing on crowds weren't going to care if you they were U.S. citizens or fellow Chinese. Plus we had people we couldn't find. The U.S. Geological Survey lost track of their people who had gone to remote areas. Thanks to tremendous efforts by the Chinese, we managed to locate one guy deep in the mountains. But, he refused to leave his equipment, so that was that.

Also the U.S. universities and scientific communities immediately worked to make sure that the Chinese graduate students here were protected.

I seemed to do endless Circular 175 memos which authorized agreement negotiations.

We held regular meetings with the Japanese. Their energy people and the Department of Energy had agreements, and they had annual meetings. The meetings generally in Hawaii - to everyone's utter delight. They did meet once at the University of California Irvine.

There was a Japanese way of doing things, once for a sub group meeting, they insisted on having the minutes agreed to before the meeting. Despite some head scratching, DOE agreed - assuming that then they could get a lot off-the-record discussion done. Instead, the Japanese stuck to the script.

At this point I dealt a fair amount with the Japanese embassy science and technology people. The science counselor type had gotten his doctorate at the University of Maryland, was a friend of a friend who had persuaded him to accept lox and as American sushi. He was very easy to deal with. The political types were very sensitive on their prerogatives. At one point he complained that State Department let the Department of Energy talk too much during the meeting and that would give the Japanese energy people ideas.

The Korean science counselor and the economic counselor were often feuded, so I would be in the position of getting a demarche in the morning by phone from one and having it withdrawn by the other in afternoon. It was by phone because the Korean Embassy refused to let the science counselor use the chauffeured embassy car. He could not come by taxi as that would be a loss of face.

There was a fair amount of discomfort on the part of the Japanese and Korean science counselors dealing with an older female science type. But it solved itself very easily once they established that I was a woman of mature years, a mother of three children, and somewhat akin to being a creature from Mars. I was sort of outside of their hierarchy. I knew the Japanese were much more comfortable with me when they stopped sitting at the edge of their chairs with their hands locked on their knees staring at more or less my right or left shoulder. My boss, Marty Prochnik, had been a Foreign Service Officer and a geologist before he shifted to the Civil Service. He understood all about foreign service types.

He was also a physical fitness maniac and you would see him running around the reflecting pool every lunch. He would go on regular little diets to keep himself fit, but when he went on the diet, he would absolutely have a yen for donuts. But, instead of buying one donut, he would get two dozen donuts, bring them to the office. He ate two bites and we expanded our waistlines. But that was just one of the fun assignments I had before I went on to the Una Chapman Cox fellow.

Q: What did you feel was, did you feel that state department was able to deal with science matters fairly well? I am talking about just maybe passing them off to the Department of Energy and other things, or did the State Department try to intrude bureaucratically? How would you describe the State Department's role in science and technology?

JONES: Basically we had a statutory role which was easy for my office because of the circular 175 process. All the agreements had to be done through the process managed by State. However as far as acceptance of the agreements go, we did not have a real role. We had no funding capabilities for one thing.

Environmental issues were the responsibility of another OES office; other offices dealt with Space, Health, Maritime, and Biodiversity issues. Another office dealt with Space and one dealt with For instance things like the at that point it would have been Montreal protocol that were negotiated through the office of environmental and scientific affairs. And the office that dealt with space cooperation

It was a hard for State to accept that in certain areas we just had nothing like the lead. In fact the other agencies tended to see us as more or less the administrative handmaiden to get their things done. They did all the prime negotiations.

For instance on AIDs research. We had a Thai princess who was also a Ph.D. microbiologist. She wanted to make sure that they got better data on HIV data, but everyone recognized that having NIH (National Institutes of Health) people running around the red light districts taking blood samples was not a smart idea. So the role for the Centers for Disease Control and NIH was to train Thais to do the sample collection. Though, there was no intellectual property involved in getting data on HIV incidence, it was very hard to persuade groups like USTR that we were not trying to do an end run and destroy the U.S. intellectual property structure.

We had another incident where the minister for science and technology for Corazon Aquino's visit to the U.S. wanted to have a signing ceremony for an S&T cooperation agreement. They proposed an agreement with the Smithsonian which was a short paragraph in which both sides agreed to cooperate to help humanity. The Smithsonian wears two hats - one government and one private. For the government agreement, we presented her with our intellectual property rights annex at which, she looked at us and said, "We have offered you free love. You are handing us a pre-nuptial agreement." So they said bye by signed with the private side.

We also had a curious incident. NOAA was getting rid of its old radar.

Q: NOAA being...

JONES: National Oceanographic and Atmospheric Agency. They were scrapping old radars. We had a scientist in Indonesia working with Indonesian counterparts who said, "Hey, you want a radar? If you pay for the shipping you can have it." They agreed. No one told either government." He wasn't even there to sign their agreement but had a colleague sign it for him. The radars arrived and were seized as spy equipment by the Indonesian government. Finally, State Department was brought back and State's legal people's managed some dexterous language that somehow managed to paper over the earlier omissions

We had a little letter, again this is NOAA. They had spent almost a year sending up sounding rockets in New to measure the ozone hole or the Antarctic. It all worked very nicely until it occurred to someone, "Gee we should have had an agreement." So they sent us a letter asking us to craft an agreement. The State Department legal people went absolutely up the kazoo but they managed some kind of complicated language that covered it for eternity backwards and forwards.

Q: Question arise, you mentioned the Thai princess. I have heard stories when you are dealing with Thai royalty you have all sorts of problems. I am thinking protocol wise. Is that...

JONES: No, she was acting as a microbiologist. Basically she just lent her name to the effort. We didn't even know how they funded their side. Her basic idea was that before they could try different kinds of treatments behavior modification efforts to help the sex workers, they needed to know how bad the situation was..

Q: How about, you were there I mean obviously continues today, but when the epidemic of the AIDS disaster really came in full force and full knowledge. How did that impact on you all?

JONES: OK there is actually a special office in OES that deals with the medical issues. Our office was only in the loop if they ran into trouble under an agreement,.

Access was always a problem as many countries consider their mineral resources to be national secrets. They were always concerned about what satellites could pick up.

Occasionally there were major successes in cooperation. The Chinese and the U.S. cooperated in a huge study on the impact of folic acid on spina bifida. Pregnant women were told to take folic acid to cut down the incidence and compared with women who had taken a placebo. For this study, they needed a huge population base, and they needed huge controls. Now the Chinese are pretty much genetically fairly uniform. So you could compare like to like.

U.S. researchers helped by taking the raw data they had and doing the full statistical analysis with our advanced computer systems. Very quickly it became clear that it cut the incidence of spina bifida tremendously. Since the folic acid doses were very low, it became policy around the world to have folic acid as a supplement in your breads.

In fact there were a fair number of studies done in China on the effect of various carcinogens, where again collected the data and we analyzed the data. For example, there is a kind of special dish popular in parts of China which requires a mold to be grown on some kind of pickled vegetable. The mold adds flavor but it also greatly increases the incidence of throat, tongue and mouth cancer.

Q: How did you find India, because India in that period was still an enclosed area. It was not open to outside, I am trying to think of the term. Well closed market an all of that. How did you find India?

JONES: There were a lot of barriers. OK I had a very bright young woman called Marilyn Pifer whose husband Steve Pifer later became an ambassador. She handled the very difficult negotiations on intellectual property rights.

We had problems with the Canadians for another reason entirely -- they already took care of the issue directly by filing for intellectual property rights in the U.S. and Canada if they came up with something. And if we came up with something we filed for the intellectual property rights in Canada and the U.S. And if the research was such that there was nothing but basic research which they wanted in the public domain, no one had to do anything. So they again felt it was very unnecessary.

Even countries which were not intellectual property rights problems still had issues because legal systems were different. For New Zealand for instance, we had to have teleconferences for the lawyers

Q: So you didn't deal with the Indians.

JONES: Not so much directly. I only handled it, just like I had. Linda Staheli handled the Japanese mostly because she was extraordinarily diplomatic, patient and organized. For example, she arranged a softball game with the Japanese embassy. They played right in Arlington. The one problem we had was one of the OES secretaries was in one of the DC softball teams and she was a power player. As a result OES ended up with a nice little trophy presented by the Japanese embassy.

Q: How about Taiwan.

JONES: We did not deal with Taiwan issues at all. We have such an open system that the horse was never in the barn. We were trying to build the barn.

From there I went to the Una Chapman Cox fellowship where I wrote whatever I wanted to. That was when I discovered I could indeed write.

When I was in INR I was on the "Foreign Service Journal" editorial board. It was very sad in a way because to see huge numbers of submissions by retired foreign service officers who had done wonderfully interesting things. One man wrote about post war Japan. This was a period when the Japanese labor movement was very red, and caused a great deal of grief. There were riots in the streets, so we all read the article with great anticipation. Alas, most of the article was how he learned to do a reporting cable because he had a wonderful DCM who was his mentor. Others that we received all read like memoranda to the secretary.

Q: I know. This is one of the hardest things to get away from. Well what role did you feel that the "Foreign Service Journal," you were working for them on the board from when to when?

JONES: I am trying to remember. I was still in INR, so it would have been '80 to '83, probably '83, but it might have been a year or so later.

Q: Well in the 80's. How did you see the role of the "Foreign Service Journal?"

JONES: I thought they were respectable. They wrote well. They were necessary in the sense that the Department of State magazine was becoming more and more of a house organ. Over the years I think they dropped all the controversial things like they used to do such as writing up different grievance actions.

Q: American Foreign Service Association.

As for the American Foreign Service Association, they are both a union and a professional organization. This meant some of conflict of interest because the first thing the head of AFSA is almost always a senior foreign service officer, which put him in the management column. If after a term as head of AFSA he had any hopes of another ambassadorship, then burning all his bridges while head of AFSA was not a good idea. At the same time they were very limited and could not negotiate like a labor union.

I grew up in a union town in Vineland, New Jersey and I know how the unions operated. Foreign service officers don't think of themselves as part of a union. They think of themselves as professionals. Even junior foreign service officers get management duties overseas. For all the complaints, the turnover rate for the Foreign Service is very low so people must be pretty satisfied.

They acted more as if they were part of an elite group. The testing procedure acted as sort of a common bond which was further strengthened by the A-100 classes. There was actually less gamesmanship than I expected. I saw some things which I thought were odd in the sense that people were promoted so much by their individual performance that always you had people who felt undervalued. You also had people fighting for the credit occasionally.

I was very fortunate to have worked in technical areas where no one fought over credit. They didn't denigrating someone else's work to boost their own standing as useful. But, I could hear the screaming and yelling, for instance, in the office across the way when I was in Science and Technology Cooperation. The office of environment was headed by a man who brooked absolutely no opposition to his environmental so you were either an apostate or you were a follower.

A colleague of mine who was a chemical engineer background and was also a professional science officer at State actually dared question some of the assumptions and had his career almost destroyed. The head of the Environmental Office, Andy Sens,

seemed to relish dominance and if it helped him look good -- it was good enough for him. He could have matched any commissar under Stalin.

There was so little recourse for a Foreign Service officer unless you wanted to torpedo the aircraft carrier kamikaze fashion.

Q: Well there was one part of your career that we didn't, we sort of just touched on at the very end was the board of examiners wasn't it?

JONES: Oh I did a board of examiners stint, and I also after Canada was in senior personnel.

Q: OK we did board of examiners, how about senior personnel? What was your impression of that?

JONES: I thought it was very interesting. The whole system was set up for serious conflicts of interest, because if you were in personnel, and you expected to go on for another assignment, a senior counseling officer was the only one who would be competing against his own or her own clients for positions.

In fact when I came on board there had been a big whoop-de-do because a predecessor whose name I do not even know apparently told the bureau that someone they wanted was unavailable for a very nice position, I think in South Africa. Then he himself got it. Then the person found out from someone else in the bureau that he had been stabbed by his personnel officer.

I was comfortable doing it, first because they were abolishing the science cone. Second I intended to retire when David did so it was just a matter of timing for us. Third, you really had to be willing to fight hard for your clients. We had "shoot-outs" were when two people wanted positions or three people wanted positions. It was a fairly senior position. It was up to the CAO to argue for the client. You made all the arguments based the client's efficiency reports, based on the career needs and occasionally based on medical needs. This took an enormous amount of work. I think I won every one, but each one was a nightmare amount of work. If you had two clients who both wanted the job, you had to hand one of your clients off to another counseling officer.

Q: Here you are dealing with the science officers is that right?

JONES: I handled science officers when I represented science and Labor Officers. and also anyone with the last names beginning from C to G. Then we also represented bureaus - so I had the consular affairs bureau and Interamerican Affairs at the time, Latin America.

Q: Well let's say there is a job open. It is a desirable job. You have the stable of people. So in a way whom are you representing? You can't represent the stable because they are all your clients aren't they?

JONES: Well the first thing you have is the bid list. So your clients bid for any single position you have a list of your clients C to G who wanted this particular position. I thought the fights would be over postings to Paris, London...and so but our shoot-outs were over things Beirut, Hanoi, and Tananarive.

Then we had bureau shoot outs rather than post shoot outs. Several posts might want one person for a specific position. The system had its glitches. At one point I had two people with the same last name ask me to check their personnel file. Both had just gotten promoted, and we found out that they had been switched. They had gotten promoted on each other's records.

We had individual people who called in who were low ranked. One person mentioned that when he had taken this assignment, it had cost him his marriage, had estranged him from his children, so why didn't he get promoted? We had to explain that it was not a case of what you sacrificed on the altar that got your promotion.

We had others where there last minute emergencies. One had a son fall very seriously ill so he had to come back to the States. There was a great deal when here would be an emergency opening, such as someone who was killed in an auto accident. It was a consul general t position.

The Secretary of State's Office could often cause problems. Madeline Albright's group was very closed, he had her favorites, and she had a senior woman who said absolutely the last word, and occasionally this last word was to fire someone with no notice. or explanation.

Q: Who was the senior woman?

JONES: I don't remember her name.

Q: If you can pick it up it would be interesting to have. I don't have much data on the Albright group. It seemed to be an enclosed group. Not very, it has not worn very well. The Baker group was closed but they were really very good people.

JONES: Yes, they were closed, but their efforts were to help. The Madeleine Albright group was proof that a woman can be just as difficult and bad as a secretary of state as any man can be. They were very ideological. If you were a foreign service officer said something that didn't fit with the prevailing belief at the time you were fired. I got to memorize like the 16 digit computer codes for places in temporarily, in the Freedom of Information Act (FOIA) and in the historians office because they were the only places who had positions listed at senior levels but which were open to fast assignments. Their people had the view that you were against them until you crawled enough to prove that you are with them. I, at one point read efficiency reports that she had written when she was the Ambassador to the UN. They made clear that the greatest Foreign Service Virtue to her was jumping higher and harder at her snap of the fingers. That is what they valued.

There were certain people who they were especially against and whose careers they destroyed.

Q: Do you have any idea what may have prompted being against?

JONES: I have no idea, but in my experience is that the super ideological are totally intolerant of difference and usually deserve each other. Whether you are to the left or to the right, the intolerance is the same.

I noted it when I wrote articles on global warming that ran counter to the prevailing worship of Al Gore and the insistence that the Science had reached the level of proof. I argued that there was no need to use the science as God's cattle prod to make people do the "right thing." It just didn't track with the actual level of knowledge or modeling skill. In fact, there are things that could be agreed to as good actions whether you believed in global warming, in global cooling, in helping the poor of the world or in improving energy security. Remember, they had a mini ice age in Europe without any contributions from us. There are dinosaurs in the Antarctic; the dinosaurs died out without any help from us.

Q: Well going back to the Albright group. You say that there was one of her inner circle that really pretty well she had control pretty much over at least vetoing certain senior assignments.

JONES: Oh yes they did. And not only that they word was passed out. I did the D committee. D committee is the committee that meets to determine who would be presented as possible ambassadors for Senate confirmation. The Secretary of State has a representative or is present. The undersecretary for political affairs and the Director General and The Deputy Secretary of State were members.

Technically speaking once we get a list from the White House a lists of posts which are open to foreign service ambassadors, each of the counseling officers would go through their lists and see who was basically a potential candidate. I would actually call people. The bureaus were asked if they had anyone they were specifically interested for specific posts. The director general could also add any names he wished. So whenever my clients had ambassadorial ambitions, I always urged them to go to the bureaus and to meet with the Director General. At some point in the process before they could actually be named, they had to be vetted. The vetting required to determine you didn't have security problems, EEO problems etc. There a certain number did get eliminated for bad inspections, grievances, EEO problems, security problems...and so on. Now this means that someone with a questionable corridor reputation could be very easily eliminated. But anything cold happen with corridor reputation.

I had one client come in who was really upset. The director general had told him he didn't have a chance with his sexual harassment record. He couldn't understand it because he had no sexual harassment record. He practically had a coronary in my office. He turned bright purple actually. But we checked further and found out that he had never

served at that post. Well it turns out that if you are director general and you meet lots of people - one large fat white male looks a whole lot like another one. He had remembered it wrong. So the man was able to go back, clean up that, and eventually he did get an ambassadorship.

EEO things could be a real problem. I had one client who was never able to overcome it. He had been brought back after retirement because of his language skills to work with a UN group in the Former Yugoslavia. There was a sexual harassment claim and the Post ejected. But they had completely neglected the due process rights and forgot that he reported to the desk.

No one even knew the correct procedure for handling sexual harassment allegations. It turned out to be a woman who made habit of such allegations and who stayed on and worked for him for six months until her contract ran out. At most, it seemed to be some jokes at a Christmas party. He had retained a lawyer to clear up his record when the record disappeared. When I left personnel he was still desperately trying to clear his name. Then we had an EEO problem in our own office, where a senior civil service black female professional felt that she was not given her due or anything and that the white female who headed our office particularly disliked her and did all sorts of things to undercut her. I actually ended up making a deposition on it. Now neither one of the women was a personal friend. I was careful once it started not to have lunch or to have social contacts with either one because it would taint what I said. I kept what I said to what I actually observed. The Director of the office refused to deal with it.

There was a similar case in Canada when the foreign commercial service officer in Ottawa abused the one in Montreal. Alas, the DCM just sort of hid

Q: What was your impression of the D committee of basically the caliber and the appointment of ambassadors. In gross terms how did it work?

JONES: Who you know really helps. This is my opinion because a fair number of the best posts went to people who the White House just put down their name anyway. It was not picked by the D committee. To all outward appearances this is a professional foreign service officer that got the ambassadorship. They were either well and favorably known by someone in the White House, or they had worked at the NSC and they were just named to the position.

I thought there were an immense number of really brilliant people in the Foreign Service who were champions at tacking to make speed under the prevailing winds. I was shown how re inventing government resulted in a book of instructions that looked like a paperback. Of course the annexes made a stack taller than I was.

The level of computerization was still pretty pathetic. It took Colin Powell to put the State Department into the internet world. Our information management people were still shifting over from being communicators to being computer experts. So we were having difficulties there. Personnel, we ran into such difficulties with the bid system we had to re

enter the bid cables manually. We all worked, I think I worked an extra 15 hours per week doing it. It was pathetic as far as management went.

Q: Well speaking of management, did you notice a dearth of candidates to be ambassadors sort of in the management field. I am not speaking about professional managers, but somebody who comes out of the NSC or something often has managed a half a secretary at most. Was this at all an issue?

JONES: Exactly. Well it helps to have been a principal officer somewhere to be an ambassador. In many cases it was the Administrative officers who had the inside track for these positions. So in that respect they did well, but the State Department attitude to Administration was a very odd one. We are not the army. We are not a perfect pyramid with generals on top. The Administrative skills needed for the Army are quite different for example, you might actually have to 1100 trucks from this part of Iraq to another part of Iraq.

At the State Department logistics are totally different. I thought of the contrast because at one time my brother was working on a U.S. air traffic control upgrade project. He managed 75 engineers who had to produce. They needed to produce software to allow airplanes to be mapped and located following the actual curvature of the earth. The purpose of the administrative officers was to support those who produced.

In the State Department, somehow the Administrative Cone ended up dominating the other Cones. So management skills became the mantra; everyone sought multi cone assignments to prove you cold manage - but no one asked "better management for what?" Only the consular area had it right. First they had products and a consular report to track actual work. They had to produce. When things went badly, you had people waiting for three days squatted in front of the consulate. The pyramid structure worked. But in the other cones, efficiency reports eventually began sounding as if the only purpose for an assignment was to develop Administrative skills rather than a higher level of diplomatic and analysis abilities.

Q: This is one more look at sort of the criteria as I. Well you left when now?

JONES: OK, we haven't covered the period from '92 to '96 which is my two Canada assignments.

Q: I think we did didn't we?

JONES: We did a certain amount. Afterwards I came out and I did the counseling in assignments, and at that point I knew that I would be retiring before the next full year was up. So I curtailed so that they could replace me with someone who would be there for two years. I think he then retired also. I went to FOIA where I figured I had a very nice parking orbit and spent the time improving my understanding of Boolean Logic. I rewrote some of the regulations because at the time we had official use only. I thought the FOIA people were wonderfully hardworking and unappreciated. It also made it possible

for the retirees who came back to work to have some financial benefits while the system benefited from their experience.

Q: FOIA being...

JONES: Freedom of Information Act. From there on in as I said practically finished. We went to career transition which was three months at the time which basically focused on telling us things that we could do. The very happiest ones in Career Transition were senior secretaries who not only were happy to be retiring, but knew that they had immense value on the market. Any time they felt like getting money for a new Mercedes, it was just a matter of temping for some exec until they had it. They had totally portable skills. Most of them had worked out where they wanted to go.

The hardest and most difficult cases were the ones who were being forced out for time-in-class. I always thought their years of expertise could still be used and I believe that was the idea behind the American Foreign Service Association's Foreign Service Reserve Corps.

There are so many good people that who even if they never became ambassador still had much to contribute

At the same time, it was useful to remind others that confirmation as an ambassador was not deification.

There are horror stories - some on political appointees but others from our own ranks. For example, when Ambassador Enders died I noticed that not a single obituary said he was a nice guy. The drivers used to tell horror stories about him and his wife, the Contessa Enders, years after they left. Then there was Ambassador MacArthur whose wife was even worse than he was. She exacted total obedience from the junior wives. And State allowed these abuses.

Our Society is rich in talent. Something that I was reminded of when I was on an Air Force plane with the Science and Technology intelligence committee. There were 11 general officers on the plane -- so I asked what would happen if we went down-would it cripple the Air Force. The answer was simple -- 11 promotion parties.

The greatness of the U.S. foreign service is the incredible depth of the skills, abilities, dedication, and willingness to learn,. For example, when the Russians quit en masse at Embassy Moscow, and our science counselor ended up as the principal driver because he had the only one to figure out the street maps. It's the can-do spirit.

There are always going to be horror stories as well as wonderful tales involving the political as well as the non political ambassadors. I remember hearing tales an ambassador's wife who refused to let Embassy personnel use the residence bathrooms when they were working there after Nicaragua earthquake -- others opened their homes to all who needed help.

In sum, I was glad that I was useful in the State Department. I kept my scientific professional standards which is if I had to give bad news, I gave it. If I had to stand behind what I said, I did. And if I was wrong I was perfectly willing to have it stuffed up my nose. That is my kind of discipline. As for human relations, I was saddened to see a certain element of chickens pecking wounded chickens. My family had a poultry farm in Dorothy, New Jersey and I saw other chickens peck any wounded chicken to death. There was something of that, maybe in the competitiveness. It was a good time and I truly benefited from it as we paid for three daughter tuitions out of current income. The center of my life remained my family but work in the Foreign Service made the rest of it interesting as well.

Q: OK, well I want to thank you very much.

End of interview