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Description of document: National Security Agency (NSA) Oral History of Charles

C. Tevis, Former Director DEFSMAC, NSA OH 1988-05,

1988

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National Security Agency

NSA/CSS MDR Appeal Authority P133

National Security Agency 9800 Savage Road, Suite 6881

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MD 20755-6881

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NATIONAL SECURITY AGENCY CENTRAL SECURITY SERVICE FORT GEORGE G. MEADE. MARYLAND 20755-6000



Serial: MDR-114546

10 June 2025

Please refer to your request of 25 June 2022 for a Mandatory Declassification Review of the Oral History of Charles C. Tevis, NSA OH 1988-05. The material has been reviewed under the Mandatory Declassification Review (MDR) requirements of Executive Order (E.O.) 13526 and is enclosed. We have determined that some of the information in the material requires protection.

Some portions deleted from the document were found to be currently and properly classified in accordance with E.O. 13526. The information denied meets the criteria for classification as set forth in Section 1.4 subparagraph (c) and remains classified TOP SECRET as provided in Section 1.2 of E.O. 13526. The withheld information is exempt from automatic declassification in accordance with Section 3.3(b) (3) of the Executive Order.

Section 3.5 (c) of E.O. 13526, allows for the protection afforded to information under the provisions of law. Therefore, the names of NSA/CSS employees and information that would reveal NSA/CSS functions and activities have been protected in accordance with Section 6, Public Law 86-36 (50 U.S. Code 3605, formerly 50 U.S. Code 402 note).

Please be advised that the responsive document includes other government agencies' information. We have consulted with and received input from one other government agency and have protected its equities with the other government agency (OGA) redaction code. At the time of this letter, another agency's response is outstanding. However, we were able to isolate that agency's equities, so we have protected them using the other government agency (OGA) redaction code.

Serial: MDR-114546

Since your request for declassification has been denied you are hereby advised of this Agency's appeal procedures. Any person denied access to information may file an appeal to the NSA/CSS MDR Appeal Authority. The appeal must be postmarked no later than 60 calendar days after the date of the denial letter. The appeal shall be in writing addressed to the NSA/CSS MDR Appeal Authority (P133), National Security Agency, 9800 Savage Road, STE 6881, Fort George G. Meade, MD 20755-6881. The appeal shall reference the initial denial of access and shall contain, in sufficient detail and particularity, the grounds upon which the requester believes the release of information is required. The NSA/CSS MDR Appeal Authority will endeavor to respond to the appeal within 60 working days after receipt of the appeal.

Sincerely,

Jacqueline M. Amacher

Chief

Declassification Services

Encl:

a/s

TEVIS, CHARLES C. FORMER DIRECTOR DEFSMAC

GOING TO GET

TODAY IS THE 19TH OF AUGUST 1987, OUR INTERVIEWEE IS MR. CHARLES C. TEVIS. MR. TEVIS BEGAN HIS MILITARY CAREER WITH THE US ARMY SIGNAL CORPS EARLY IN WORLD WAR II, AS A LINGUIST AND ANALYST AT ARLINGTON HALL. LATER, AFTER THE WAR, AS A CIVILIAN, HE JOINTED THE AFSA ELEMENT RESPONSIBLE FOR MONITORING AND REPORTING ON THE PROGRESS OF A TARGET COUNTRY'S MISSILE PROGRAM. HE WAS ONE OF THE PRIME MOVERS IN DEVELOPING A SIGINT MISSILE AND ASTRONOMICS CENTER. MR. TEVIS BECAME THE FIRST CHIEF OF SMAC AND SUBSEQUENTLY HELPED TO ESTABLISH THE DEFENSE SMAC WHICH HAD A BROADER AND EXPANDED MISSION. THIS INTERVIEW WILL ALSO BE USED IN THE PREPARATION OF THE OFFICIAL HISTORY OF THE DEFSMAC. ALSO PARTICIPATING IN THIS INTERVIEW PRESENT DIRECTOR OF DEFSMAC, MR. JIM HILLMAN IN DEFSMAC, AND HELEN TUCKER WHO IS WRITING THE HISTORY OF DEFSMAC. INTERVIEWER IS BOB FARLEY. MR TEVIS DESIRES THAT THE CLASSIFICATION OF THESE TWO CASSETTES IS TOP-SECRET- CODEWORD—TK—SENSITIVE—NOFORN.
THIS IS NSA ORAL HISTORY INTERVIEW 21-87
F = BOB FARLEY
T = CHARLES TEVIS PL 86-36/50 USC 3605
C =
H = HELEN TUCKER
F: ALRIGHT LET'S GO AHEAD THEN. CHARLIE WHAT I WANT TO DO IS RUN THROUGH ALITTEL BIT ON YOUR EARLY CAREER, SMAC AND THEN DEFSMAC. SO, YOU CAN TALK AT ANY LEVEL THAT YOU WANT WE HAVE ALL THE CLEARANCES YOU CAN CONTROL IT, I HAVE AN ACCESSABILITY STATEMENT WHICH PERMITS YOU
T: AND YOU CAN EDIT IT TOO, CAN'T YOU?
F: YES SIR, YES SIR. ((LAUGHS)) TAKE OUT ALL THE SWEAR WORDS, HUH?
T: JUST IN CASE I SAY A BAD WORD OR SOMETHING
C: LET ME TELL YOU ALITTLE BIT ABOUT WHAT THIS IS
T: WHAT'S THIS FOR ANYWAY?
C: WE'VE GOT THE 25TH ANNIVERSARY COMING UP. FOR THE ANNIVERSARY, I'VE BEEN WORKING WITH THE PEOPLE AND WE WOULD LIKE TO HAVE A WRITTEN, ONE OF THOSE BLUE BOOKS HISTORY OF DEESMAC. AND SO SOME OF THIS I WOULD PERCEIVE IS

TRANSLATED INTO HARD COPY AND BEFORE THAT GETS PUBLISHED, OBVIOUSLY EVERYBODY THAT HAS A HAND IN IT WILL BE ABLE TO LOOK AT IT AND VIEW ALL OF THAT. WE WOULD ALSO LIKE TO GET ALL THE OTHER PREVIOUS DIRECTORS, YOU KNOW, SO THIS MAYBE AN INTERITIVE PROCESS AT LEAST THE HARD COPY, SO DON'T WORRY ABOUT ANYTHING YOU SAY ON THE TAPE GETTING THE DEFSMAC HISTORY WITHOUT HAVING THE CHANCE TO EDIT IT, REVIEW IT AND SEE WHAT IT LOOKS LIKE. AS A MATTER OF FACT, NORMALLY I CAN IMAGINE, EVEN SOME OF THE OTHER DIRECTORS MAY REMEMBER THINGS DIFFERENTLY AND WE MAY EVEN HAVE SOME NEGOTIATING SESSIONS AS TO WHAT FINALLY GETS IN THERE. I WOULD LIKE TO GET A BOOK PUBLISHED THAT AT LEAST HAS A CONCENCUS IN IT OF WHAT DEFSMAC IS, HOW IT GOT STARTED AND WHAT IT HAS BEEN DOING THE LAST 25 YEARS.

- F: AND HELEN IS WRITING THE HISTORY. SO I'M COOPERATING WITH HER
- T: WELL YOU'VE GOT QUITE A JOB, DON'T YOU HELEN?
- H: YES SIR.
- F: SO, MR. TEVIS IF YOU'D BE SO KIND, JUST GIVE ME A QUICK AND DIRTY BACKGROUND, LATE TEENAGE DAYS, PRE-MILITARY DAYS, MILITARY DAYS, BEFORE YOU CAME INTO THE BUSINESS. JUST SO I CAN SET THE STAGE AS TO DATES, TIME AND PLACE.
- T: BEFORE : CAME TO DEFSMAC, RIGHT?
- F: YES SIR, WELL YOU HAD SOME MILITARY, DIDN'T YOU? JUST A LITTLE BIT AS TO WHETHER IT WAS SIGNAL CORPS OR ENGINEERS OR ELSE. AND THEN WE'LL JUST PROGRESS. MONTH BY MONTH
- T: WELL, IN 1942 I WENT OUT AND ENLISTED IN THE ARMY. THEY WERE EAGER TO HAVE ME THE MAN TOLD ME WHEN I WENT THROUGH INDUCTION CENTER AT FORT HAYS, COLUMBUS. HE WAS A PSYCHOLOGIST TRYING TO FIT THE NEW INCOMING INDUCTEES INTO ROUND HOLES FOR THE ROUND ONES AND NOT THE SQUARE ONES. HIS EXPERIENCE WAS AS A MILK TRUCK DRIVER AND HE FOUND OUT THAT I WAS A PSYCHOLOGIST AND HE SAID, "BOY DO WE NEED YOU. YOU WILL STAY RIGHT HERE FORT HAYS . " I GOT UP THE NEXT MORNING AT 4 O'CLOCK WHEN THE BUGLE RANG AND THEY READ A LONG LIST OF NAMES OFF, INCLUDING MINE. I THOUGHT MY GOSH I DIDN'T KNOW THERE WERE THAT MANY PSYCHOLOGIST IN THE ARMY TO STAY HERE. WE MARCHED DOWN TO THE RAILROAD TRACK, WHICH I THOUGHT WAS ODD, GOT ON THE TRAIN. I THOUGHT THAT THE ARMY SURELY HAS MADE SOME MISTAKE BECAUSE I WAS GOING TO STAY HERE AND RUN THE PSYCHOLOGY DEPARTMENT FOR THE ARMY. TURNED OUT I DIDN'T. I WENT ON OUT TO MINERAL WELLS, TEXAS WHERE I WAS INDUCTED INTO THE ARMY. WELL, I MEAN WHERE I WENT THROUGH THE BASIC TRAINING, BECAME A GUNNER INSTRUCTOR ON THE MACHINE GUN RANGE. WHICH IS ONE REASON THAT I DON'T HEAR SO WELL. ANYWAY THAT WAS MY INTRODUCTION INTO THE ARMY AND THE INFANTRY. I BEGAN TO HAVE A LITTLE CHANGE OF THOUGHT AS TO THE BEST PLACE TO SERVE IN THE ARMY AS THE INFANTRY, BECAUSE IT WAS VERY HOT OUT THERE AND DUSTY. SO, A COUPLE CAPTAINS CAME AROUND FROM WASHINGTON AND THEY DIDN'T TELL YOU WHY. BUT YOU HAD TO GO TO THE PATTALION

THEATRES THREE DAYS IN A ROW AND TAKE TESTS, WHICH I DID. YOU KNOW, WHATEVER THE TEST IS FOR, I'LL TAKE IT. THE FINAL TEST, THE NEXT TO THE LAST TEST I TOOK WAS ONE CALLED AN ARTIFICIAL LANGUAGE TEST, IT WAS SUPPOSED TO TEST YOUR ABILITY TO LEARN A FOREIGN LANGUAGE. I DID NOT TELL THEM THAT THE CC TEVIS AT THE BOTTOM OF THE TEST AT WAHAY STATE UNIVERSITY, WAS THE SAME AS THIS PRIVATE TEVIS TAKING THAT TEST. SO I SCORED VERY HIGH ON IT.

F: ((LAUGHING)) BEAUTIFUL.

T: FOLLOWING THAT I HAD THE FINAL HURDLE, WHICH WAS THAT YOU HAD TO BE FLUENT IN TWO FOREIGN LANGUAGES. RUSSIAN, JAPANESE, OR WHATEVER, AND I MAJORED IN FRENCH, SO I THOUGHT THAT I COULD PASS THAT, BUT I ONLY HAD ONE YEAR OF GERMAN, AND THAT WAS BECAUSE MY GIRL AT THE TIME WAS TAKING GERMAN AND WAS PRESIDENT OF THE GERMAN CLASS. EVERY YEAR THEY PUT ON A PLAY. THE YEAR I WAS GOING WITH HER IT WAS WILLIAM TELL, SO YOU CAN GUESS WHO WAS WILLIAM. THIS TEST WAS THIS CAPTAIN IN THE SIGNAL CORPS WHO PULLED OUT THIS BOOK AND READ TO ME OUT OF IT. I PASSED THE FRENCH TEST. IT WAS GERMAN, AND I KIND OF SNICKERED, BECAUSE IT WAS WILLIAM TELL - ACT II. I PASSED THAT. I ENDED UP ON A TRAIN WENT TO THE UNIVERSITY OF CALIFORNIA. THERE WAS A PROGRAM FROM THE ARMY TO TEACH PEOPLE JAPANESE IN THIRTEEN WEEKS. THAT WAS A PILOT PROGRAM TO SEE IF IT'S POSSIBLE TO DO. THERE WERE THIRTY-TWO OF US THEY TOLD US TWENTY-TWO WOULD GRADUATE, AND THOSE THAT GRADUATED WOULD BE GOING TO ARLINGTON HALL SCHOOL FOR GIRLS. THEY NEGLICTED TO TELL US THEY HAD TAKEN ALL THE GIRLS OUT OF THE SCHOOL.

F: THEY HADN'T BRIEFED YOU OR ORIENTED YOU AT ALL?

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T: NO, WE WENT IN THIS ROOM AND THIS GUY GOT UP ON THE STAGE. HE HAD ON A CAPE LIKE ROSEVELT WORE, YOU KNOW NO ARMS IN IT. HE SWIRLED AROUND, HIS NAME WAS DR. BUCHANNAN. JIM LIKEMAN OF NSA,
FORMERLY OF NSA AND WERE THE LAST TWO MEMBERS OF THIS CLASS,
THEY STAYED WITH THE AGENCY AND ARE YOW RETIRED LIKE I AM. ANYWAY TOOK THIS COURSE, IT WAS KIND OF BOODLE, BUT OTHERWISE YOU WENT BACK TO YOUR UNIT, SO I STUDIED VERY HARD AND I GRADUATED AND CAME TO ARLINGTON HALL. THE ARMY HAD, WHEN THEY BROKE SOME OF THE JAPANESE ENCRYPTION SYSTEMS EARLY IN WORLD WAR II, FOUND OUT THAT TO THEIR AMAZEMENT THAT UNDERNEATH THE ENCRYPTION WAS WRITTEN IN JAPANESE MESSAGES, NOT ENGLISH. HAVING PUT MOST OF THE JAPANESE READERS/SPEAKER BEHIND BARBED WIRE IN THIS COUNTRY, THEY HAD A FEW COLLEGE PROFESSORS, SOME MISSIONARIES HAD GOTTEN OFF THE GRIPSOM SHIP, CAME BACK AND US GUINNEA PIGS THAT WENT TO THE JN IVERSITY OF CALIFORNIA. SO WE ARRIVED ON A COLD MARCH DAY AT ARLINGTON HALL.

F: '43?

T: YEAH, AND THE B BUILDING, WAS NOT FINISHED YET. A BUILDING WAS FINISHED, THOSE OF YOU WHO WERE AT ARLINGTON HALL AND REMEMBER THAT. WE WENT OVER THERE AND I WENT IN, THEY HANDED ME A STACK OF 80 MESSAGES, I'LL NEVER FORGET, TO TRANSLATE. AT THE

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END OF THE DAY I HAD ONE FINISHED AND I WASN'T SURE IT RIGHT. AND I WENT UP TO THE GUY WHO LOOKED LIKE HE MIGHT BE AN OFFICER, ALTHOUGH HE DIDN'T HAVE HIS INSIGNIA ON, HE WAS TIRED LOOKING FELLOW. HE SAID, "WHAT'S THE MATTER CORPORAL?" I WAS A CPL. BY THEN. I SAID, "I CAN'T DO THIS STUFF. YOU KNOW I HAVE TO LOOK ALL THE WORDS UP IN THE DICTIONARY. I STUDIED BOOKS THAT TOLD YOU HOW TO MAKE A WEEKEND TRIP AND ORDER LUNCH IN JAPANESE, BUT THE RECO-GOVERNMENT MILITARY STUFF I JUST CAN'T UNDERSTAND. I CAN'T DO ANYTHING WITHOUT A DICTIONARY." HE SAID, "WHAT DID YOU'STUDY?" I SAID A COUPLE BOOKS, ONE WRITTEN BY A GUY NAMED RASHARD AT HARVARD AND ANOTHER FROM A GUY IN YALE. HE SAID, "MY NAME IS ED RASHARD, IF I'D KNOWN THERE WAS GOING TO BE A WAR, WE WOULD HAVE PUT A DIFFERENT VOCABULARY IN THE LESSONS. WE'RE GOING TO SEND YOU BACK OVER TO THE HEADQUARTER BUILDING FOR A COUPLE WEEKS AND YOU'LL BE ALRIGHT." SO THEY DID, AND WE WERE. WE CAME IN AND WE WOULD HAVE THOUSANDS OF MESSAGES EVERYDAY TO TRANSLATE.

F: IS THAT AN EXCELERATED JAPANESE COURSE IN MILITARY TERMINOLOGY?

T: YES IN THE SIGNALS CORPS. THEY SENT US BACK TO HEADQUARTERS THERE IN THE MAINBUILDING WHERE THE GIRLS LIVED AND THEY GAVE US REGULAR TRAFFIC TO STUDY. I FORGET THIS CAN BE CLASSIFIED I HAVE TO WATCH MY STEP. THEY TOOK STUFF RIGHT OUT OF THE DECRYPTS TO TRAIN US WITH THE VOCABULARY AND ONCE THEY DID THAT OUR PRODUCTIVITY WENT WAY UP IN THE AIR. JIM LAKEMAN AND WHO WERE CLASSMATES OF MINE AT THE UNIVERSITY OF CALIFORNIA, THEY WERE REALLY GOOD AT THE LANGUAGE. I WASN'T ALL THAT GOOD, SO THEY WENT INTO THE DIPLOMATIC TRANSLATION. SHOULD KNOW THIS, YOU HAD TO BE REALLY GOOD TO DO TYPE STUFF. I WENT INTO THE MILITARY, ALL YOU HAD TO BE IS UNDERSTAND HOW ARM ES WORK AND BE ABLE TO READ THE LANGUAGE REASONABLY WELL. AFTER I WAS IN THERE A FEW WEEKS, I WEREN'T READING ALL OF THE JAPANESE SYSTEMS, WE READ JEQ, WHICH WAS ARMY GROUND TROOPS, BUT ONE OF THE MAIN SYSTEMS WAS JES, WHICH WAS THE AIR, JAPANESE AIR ARMY'S ENCRYPTION SYSTEM, WHICH WAS AIL OVER THE EMPIRE.

F: WERE YOU READING 2468, THE WATER TRANSPORTS?

T: YES, I WORKED IN THE WATER...MY GOD HOW'D YOU REMEMBER THAT...2468, HOLY MOSES. I HELPED FOOK BREAK THAT. ALOT OF PEOPLE DON'T REMEMBER THIS, BUT THE JAPANESE WATER TRANSPORTATION SYSTEM, ALL CONVOYS AND EVERYTHING WAS NOT UNDER THE JAPANESE NAVY. OTHERWISE THE DECRYPTS WOULD HAVE BEEN DONE IN NEBRASKA AVE.

WHERE THE NAVY SIGINT EFFORT WAS GOING ON. BUT OF COURSE WE WERE THE ARMY THE SIGINT CORPS AT ARLINGTON HALL, AND THE JAPANESE ARMY RAN ALL THE TRANSPORTS. U.S ARMY'S SIGNAL CORPS PROBLEM TO SOLVE THAT. IT WAS A VERY DIFFICULT BOOK BREAKING JOB. THE LATE DR. JULIA WARD HELPED VERY HEAVILY ON THAT AND WAS MY BOSS AT THE END OF THE WAR. SO, A FEW MONTHS INTO THIS TRANSLATION BUSINESS, I WAS SITTING THERE ONE NIGHT AND WE WORKED 24 HOURS A DAY, MY JOB WAS TO GET ALL THE DECRYPTS, I'D BEEN TRANSFERED TO A DEPARTMENT...WE DIDN'T HAVE A NAME FOR TRAFFIC ANALYSIS YET...THERE WAS A GUY NAMED STEVE WOLF, HE WAS A MASTER SERGEANT,

HE FORMED THE ESSENCE OF THE ARMY'S TRAFFIC ANALYSIS PROGRAM. HE WROTE THE BOOK ON IT AND I WORKED FOR STEVE AND THAT WAS SORT OF INTERESTING. I HAD TO MAKE INTELLIGENCE OUT OF THE RADIO TRAFFIC WITHOUT DECRYPTING IT. ESPECIALLY ON SOME OF THE SYSTEMS THAT WE COULDN'T DECRYPT. THE JAPANESE WERE VERY HELPFUL IN THAT THEY USED A LOWER GRADE SYSTEM ENCRYPT ALL THE ADRESSEES AND STUFF. WE WROTE THAT AND WERE READING THAT. THEY WERE AS BAD AS THE AMERICANS, YOU THINK THAT NSA IS BAD WHEN IT SENDS IT'S PRODUCT OUT TODAY TO 50 DIFFERENT PEOPLE, GOOD LORD THE JAPANESE TAUGHT US HOW TO DO THAT. THEY'D WRITE AN INTELLIGENCE MESSAGE IN TOKYO AND IT WOULD GO TO 40-50 ADRESSEES ALL OVER THE EMPIRE, REALLY. IT WAS FIERCE AND IT WAS VERY HELPFUL TO US IN TRAFFIC ANALYTIC SENSE. THEY WERE GREAT TO SENT PEOPLE COPIES OF STUFF BY RADIO, MY GOD ALMIGHTY. SO, I WAS SITTING THERE ONE NIGHT AND MY JOB WAS TO SCAN FOR THE TRAFFIC ANALYSTS, WELL THEY WEREN'T CALLED TRAFFIC ANALYSTS, BUT THAT WHAT THEY WERE. MY JOB WAS TO SCAN THESE IN A HURRY AND THEN THE TRAFFIC ANALYSTS, THE GUYS WRITING UP THEIR REPORTS, WE SORT OF CHEATED A LITTLE, THEY WOULD SHOW ME THEIR REPORTS THAT THEY WROTE ON THE RAW TRAFFIC AND IF I HAD ANY DECRYPTS ALREADY THAT DEALT WITH THEM IT TENDED TO CONFIRM IT. THAT WAS THE ORIGINAL CONFUSION, IT BEGAN AS A LITTLE CHEATING GAME. I HAPPEN TO NOTICE THAT EVERY DAU THAT FILED AN INTELLIGECE MESSAGE IN TOKYO, WENT ALL OVER THE EMPIRE. IT WENT OUT ON A SYSTEM CALLED JEQ, WHICH WE COULD READ, WE HAD RECOVERED THE KEY FOR IT AND MOST OF THE BOOK. ALSO WENT OUT OF JES, WHICH WAS THE AIR SYSTEM WENT ALL OVER CHINA. WE HAD NOT RECOVERED THAT, BARELY GOT INTO THE BOOK, AND I NOTICED ONE DAY, I WAS ALWAYS MISSING THREE OF THEM. I NEVER REALLY PAID ANY ATTENTION TO IT. ONE DAY I WAS LOOKING THROUGH SOME RAW TRAFFIC AT NIGHT AND I HAD JUST FINISHED READING THE DEGRYPTS AND I SAW SEVERAL OF THESE MESSAGES IN THE AIR ENCRYPTION SYSTEM, JES I SAID YOU KNOW THAT'S FUNNY, THEY'VE GOT THE SAME LENGTH AS THESE ONES OVER HERE THAT YOU COULD READ. I DIDN'T KNOW WHAT PARTICULAR SIGNIFICANCE THERE WAS, IT WAS OBVIOUS TO ME THAT THEY HAD SENT IT IN ONE SYSTEM THAT WE COULD READ AND THEN HERE IT WAS OVER HERE IN THE ONE WE COULDN'T READ. THEY WERE SENDING IT IN TWO ENCRYPTIONS, SAME MESSAGE, HAD THE SAME GROUP COUNT, WITHIN ONE. SO, I WENT OVER TO THE NEXT WING WHICH WAS WERE THE "GODS" LIVED, THOSE WERE THE CRYPTANALYSTS, AN THERE WAS A GUY NAMED CALBACK ((PHON)), LATER BECAME THE CHIEF OF R&D, DR. CALBACK, AND ANN SOLCMAN, WORKED IN THERE, NOW RETIRED. I WENT OVER AND I WAS A SGT. BY THEN AND I LAID THIS MESSAGE DOWN, RAW TRAFFIC, AND I BELIEVE I COULD TELL YOU WHAT THIS AIR MESSAGE IS SAYING. ANN LCOKED AT ME AND SAYS, "WHY DO YOU THINK THAT?" I SAID. TWELL, THIS ONE OVER HERE I CAN READ THAT, IT'S IN JAPANESE, YOU GUYS BROKE IT, AND IT'S GOT THE SAME GROUP COUNT EXCEPT FOR ONE, AND I'VE GOT THREE DAYS WORTH OF IT HERE." THIS DR. CALBACK WAS KIND OF SLOPPY LOOKING GUY, BUT A WONDERFUL PERSON THOUGH, REALLY BRIGHT, HE LOOKED AROUND AND SCREAMED, "ISALOG" ((PHON)) I DIDN'T EVEN KNOW WHAT THAT MEANT, AND SUDDENLY THERE WERE ABOUT 15 PEOPLE STANDING AROUND ALL JUMPING UP AND DOWN. FINALLY DR. CALBACK SAID, "CAN YOU GET SOME MORE OF THESE?" AND I SAID YEAH, THERE'S ABOUT A WHOLE YEAR OF THEM IN THE FILE, HE SAID, "MY GOODNESS, WHO DO YOU WORK FOR?" I TOLD HIM THIS MAJOR'S NAME THAT I WORKED FOR AND HE SAID, "NOT ANY MORE, YOU WORK FOR ME." I SAID, "I DO?" HE SAID,

"YES SIR. DO YOU KNOW WHAT YOUR JOB IS?" AND I SAID, "NO SIR" THAT'S WHEN HE TOLD ME TO GO FIND A YEARS WORTH OF THOSE THINGS RIGHT AWAY, STARTING NOW. ((LAUGHS)) SO, I DID. THAT WAS THE FIRST TIME I EVER HAD A CIVILIAN BOSS. ANY WAY AFTER THE WAR I WENT TO WORK. THEY GAVE ME SOME MERIT BADGE FOR THAT.

F: CHARLIE, CAN WE JUMP AHEAD?

T: YEAH, AFTER THE WAR I DID ALOT OF DIFFERENT THINGS.

F: THIS IS BEAUTIFUL. I WANT TO GET TO YOU PERSONALLY ALONE, SO WE CAN TALK FOREVER. BUT, THE PURPOSE OF THIS IS FOR MAC AND DEFSMAC.

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T: YEAH, LET'S GET ON TO THE MISSILE PROBLEM. I'LL JUST JUMP WAY AHEAD. AUGUST 1957.

F: AUGUST '57 IS WHEN YOU....

T: I JUST GOT BACK FROM HARVARD BUSINESS SCHOOL WHERE THIS AGENCY SENT ME THERE FOR SOME CRAZY REASON SENT ME FOR A WHOLE YEAR UP THERE. I GOT BACK AND MY BOSS WAS A LOVELY MAN, THE LATE DR. FRANK RAVEN, WONDERFUL MAN. AND UH, LOUIS TORDELLA, WHO HAD BEEN ASSICIATED WITH AT THAT TIME, HE HAD HAD A LITTLE JOB DOWN AT THE PENTAGON. HE WANTED ME TO GO DOWN THERE AND WORK WITH MR. ZAZLOW ((PHON)) AND HIM, AS A REPRESENTATIVE TO THE SECRETARY OF DEFENSE. I TOLD HIM NO, I DIDN'T BELIEVE I'D DO THAT, I'D RATHER GO OUT AND WORK WITH FRANK RAVEN IN THE FACTORY. ABOUT SIX WEEKS LATER DR. TORDELLA BECAME DEPUTY DIRECTOR OF THIS AGENCY AND HE MET ME GOING DOWN THE HALL ONE DAY AND HE SAYS, HOW'S THE FACTORY? ANYWAY, I WENT TO WORK FOR FRANK RAVEN, I WAS DEPUTY CHIEF OF (PHON)). I SHOULD JUMP BACK TO THE FALL OF '56 (PHON)). I SHOULD JUMP BACK TO THE FALL OF '56, WHICH IS WHERE THE STORY REALLY BEGINS, SPRING OF '55... '56, IT INTERESTS YOU GUYS IN THE MISSILE BUSINESS. JUST BEFORE I WENT TO HARVARD, I WAS PUT IN CHARGE OF THE RUSSIAN BRANCH, NOW THE EQUIVALENT OF PLUS A GOOD PART OF WHICH WAS IN CHARGE OF ALL THE INDUSTRIAL TRAFFIC. THE SAME JOB THAT ((PHON)) HAS TODAY. I WAS EMBARASSED THAT I DIDN'T KNOW RUSSIAN, SO I WENT TO 90 DAY WONDER AND LEARNED FUSSIAN IN SIX MONTHS. SO ONE NIGHT I CAME IN AND I HAD HEARD ABOUT THESE ROCKETS THAT THE RUSSIANS HAD DOWN AT KAPUSIN YAR, THE GERMANS SHOWED THEM HOW TO BUILD THEM, SO I CAME BACK AND I KNEW A LITTLE BIT ABOUT THE 'AMERICANS HAD AN ICBM, AND I FIGURED OUT THAT THE RUSSIANS WERE GOING TO BUILD ONE, SO LATE ONE NIGHT I CAME IN POSTED A BIG SIGN, MADE BIG SIGNS WITH BIG. RED LETTERS THAT SAID THAT ICBM EQUALS '5w+H=X. AND I PASTED THOSE UP ON THE WALL OF ARLINGTON HALL, SUMMER OF '56 . . OKAY, NO, SUMMER OF '55. AND NOBODY KNEW WHAT ICBM STOOD FOR, IN THOSE DAYS SO I HAD TO GO AROUND AND TELL THEM AND THEY DIDN'T KNOW WHAT THE OTHER WAS, AND VERY FEW PEOPLE DO TO THIS DAY. THAT STANDS FOR THE NEW YORK TIMES REPORTERS MOTTO: WHO, WHAT, WHY, WHEN, WHERE, AND HOW IS A GOOD STORY. IT WASN'T VERY LONG BEFORE A YOUNG LADY; JEAN LICKTY (PHON)), STILL WORKS AT NSA, STILL IN BELIEVE, JEAN LICKTY, SHE WAS AN ANALYST IN ONE OF THE

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PANELS, THAT'S WHAT THEY CALLED A SECTION, SHE CAME RUNNING OVER AND SHE

FOUND A MESSAGE, I BELIEVE THAT I CAN STILL

	TOP SECRET	//SI/TK//R	SEN/NOFORN	EO 3.3b	(3) 6/50 USC 3605
REMEMBER WHAT IT	WAS.			LT 80-3	6/30 USC 3603
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PROBLEM, GLEN NO	RDEEN NEW HER	WELL, MICKA ID THAT SOME	THING FUNNY W	JULIANA MI AS GOING ON	CKAWITZ, SHE
NOW,	SUMMER OF '57	, WE'RE MOVI	NG NOW. I CA	M MACK FROM	HARVARD AND
THE COLONEL THAT RAVEN, "WHAT DO THINK. THAT'S TORDER. I DIDN'T FUN, I BELIEVE I	I DO?" AND H THE FIRST TIME KNOW WHAT TH	E SAID GO IN ANYBODY IN E HELL TO CO	HIS ROOM THE THE AGENCY EV SO I WENT DO	RE DOWN THE YER GAVE ME WWN THERE, I	HALL AND THAT KIND OF T'S KIND OF
SOMETHING. SO I MADE ANOTHR SAID "ETIP #1 BY HILLMAN SITTING HAS A COPY OF TH THAT STOOD FOR E	''61." VERY BESIDE ME COU LAT SIGN, CLAI	FEW PEOPLE LD GUESS WHA MS THAT IT I	COULD GUESS W T THAT MEANT. SN'T CLASSIFI	HAT THAT SA ROGER STA ED, HE'S RE	ID, MR. YER STILL TIRED NOW.
F: MY GOSH YOU	WERE ABLE TO	PROJECT THAT	,		•
T: I WAS A FAN OF MINE, ARTHER TO BORROW HIS ID AROUND THE EARTH GONE UP	C. CLARK. I DEA, AND THE I	HAD WRITTEN DEA WAS THAT	TO HIM AND AS	KED HIM FOR TO PUT AN O	PERMISSION RBITING BODY
YET. HE HAD CON	ME UP WITH THE	IDEA OF USI	NG ONE FOR	•	

COMMONICATIONS IN 1945, ART CLARK. AND I BORROWED THE IDEA FROM HIM AND I POT
A RADIO ON IT TO SPY ON A LINE OF SIGHT SIGNALS FROM OTHER COUNTRIES. YOU
AAY WANT TO EDIT WHAT I SAY NEXT OUT OF IT BECAUSE I GAVE ONE HERB CONNLEY,
HE WAS CHIEF OF AND I WENT DOWN THERE AND THAT'S WHERE THEY HAD ALL
AND I WENT DOWN THERE AND THAT S WHERE THEI HAD ALL
ENGINEERS AND HE SAID, "WHAT IS THIS?" AND I TOLD HIM THAT IT WAS CLASSIFIED
AND HE SAID THAT HE WAS CLEARED FOR THAT, SO I SAID, "OKAY HERB," IT REALLY
WASN'T CLASSIFIED, I HAD JUST TOLD HIM THAT. HE SAID, "WHAT IS THAT?" AND I
TOLD HIM IT WAS A BODY THAT WENT AROUND THE EARTH. HE SAID, "HOLY HELL,
WE'VE GOT TO HAVE A MEETING ABOUT THAT. " IN THOSE DAYS YOU WERE ALLOWED TO
AVE MEETINGS ON THE SPUR OF THE MOMENT, NOW ADAYS YOU HAVE TO PLAN THEM.
BUT ANYWAY WE HAD A MEETING, WE HAD ALL THESE RADIO GUYS IN THERE, THAT WAS
THE FIRST TIME I MET CHARLIE POTTS, CHARLIE WASN'T A MEMBER OF THE AGENCY
YET, BUT HE WAS HERE ON BUSINESS. HE AND BELONGED TO SOMETHING CRAZY OVER ON NEBRASKA AVE. HAD TO DEAL WITH ELINT SIGNALS. ANYWAY
COMPTUING CDARY OVER ON NEDRACES AVE UAD TO DEAT WITH EXTENT CYCARAGE AND AND THE COMPTUING CONTRACT AND THE
THEY ALL CAME IN THIS MEETING AND I WAS SUPPOSED TO EXPLAIN WHAT THIS
ORBITING THING :
NAS, I'D READ ABOUT IT IN 1957, WHICH IF YOU REMEMBER WAS THE YEAR OF THE
INTERNATIONAL GEOPHYSIC YEAR, OKAY. SO, I MADE THIS PROPOSAL AND I HAD AN
R-390 ABOARD THIS ORBITING BODY THAT WAS AN HF RADIO, IF YOU REMEMBER, AND A
VHF RADIO - 1'D HEARD OF THAT. WELL, THE FIRST HALF HOUR WAS SPENT
PERSUADING SOME OF THE MEN IN THE ROOM, NOT ALL OF THEM, BUT MOST OF THEM
THAT IT WOULD STAY UP THERE. THEY KEPT SAYING THAT IT WOULD FALL, I SAID
THAT IT WOULDN'T STAY UP THERE UNLESS IT WAS FALLING, IT FALLING ALL THE
TIME, THAT'S WHAT MAKES IT STAY UP THERE. SO AFTER I GOT THEM PERSUADED AND
THAT - THEY HAD ME THEN, BECAUSE THEY SAID, "HAVE YOU HEARD OF THE
IONOSPHERE?" I SAID YEAH, I HAVE. THEY SAID WELL THE R-390 IS AN HF RADIO
AND YOU CAN'T HEAR IT UP THERE. I ASKET WELL HOW DO YOU KNOW? THEY SAID THE
SIGNAL IS GOING TO BOUNCE BACK DOWN, YOU KNOW ANGLE OF INCIDENCE? I SAID
YEAH I'VE HEARD OF THAT. THEY SHOT THE HF DOWN, AND THEY PRETTY MUCH SHOT
DOWN THE VHF TOO. I DON'T WANT YOU TO TELL ANY OF THE GUYS THIS, BUT I'LL
TELL YOU WHY THEY SHOT THE VHF DOWN TOO, DON'T SNICKER THEY SAID, "NOW HOW
FAST DID YOU SAY THAT WAS GOING?" I TOLD HOW FAST THE ORBITAL VELOCITY WAS,
"MY, MY, HAVE YOU HEARD OF THE DOPLER PRICHIPLE MR. TEVIS?" I SAID YES, I'D
HEARD OF THAT, I DIDN'T REMEMBER EXACTLY WHAT IT WAS. THEY SAID, "WELL,
THAT'S GONNA MAKE THAT RADIO SIGNAL JUMF RIGHT OUT OF THAT RECEIVER, YOU'LL
NEVER HOLD IT IN THE BAND PATH." I COULDN'T ARGUE WITH THEM BECAUSE I DIDN'T
KNOW ENOUGH ABOUT RADIOS IN THOSE DAYS, BUT YOU GUYS WHO DO KNOW ENOUGH, ENOW
THAT THAT WAS A RATHER SILLY ARGUMENT. ANYWAY, THAT WAS AUGUST '57 THAT I
WROTE THAT PAPER, SPUT 1 WENT. AND I MALE A RECORDING RIGHT HERE IN THE
BUILDING. IT WENT BEEP-BEEP-BEEP, AND IF YOU WILL RECOLLECT THE RADIO
FREQUENCY, FOR MAN-MADE RADIO FREQUENCY EVER PUT ON BOARD AN ORBITING BODY
WAS 19.995 OF SOMETHING VERY CLOSE TO THAT. I RAN AROUND WITH A RECORDING
DOWN THERE AND FOUND EVERY ENGINEER IN THAT DAMN MEETING AND SAID, "LISTEN TO
THAT, DO YOU HEAR THAT BEEP BEEP-BEEP? I SAID THAT'S WAY UP THERE AND IT'S
COMING DOWN. " {{THEY SAID}} IT'LL NEVER DO IT AGAIN. SPUNIK 2, 3, 4, 5,
6ALL HAD IT ON THERE. ANYWAY I HAD ALOT OF FUN WITH THAT; ANYWAY, IN THE
SUMMER OF '57, WE GOT OUR FIRST WIND THAT // ONE WORD MISSED!/ DECIDED TO TRY
AN ICBM. IT WAS A LITTLE
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VAGUE, THE LATE DR. RUTLEDGE WAS A KEY MEMBER, AND OF COURSE THE BRANCH WAS HEADED BY NON OTHER THAN OUR FRIEND THE LATE JOSEPH PATRICK BURKE.

F: OH, YES T: AND JOE WAS THE HEAD OF THE BRANCH AND I WAS THE DEPUTY DIVISION CHEIF AND IT WAS CALLED AND I BELIEVE THE NAME OF THE ORGANIZATION WAS

IT MIGHT HAVE HAD AN EARLIER INCARNATION, BUT IT WAS...THAT'S GOOD ENOUGH FOR...BEST MY MEMORY CAN DO. JOE WAS HEAD OF THAT BRANCH AND WE KNOW THAT THE ROCKET WENT WAY THE HELL OUT THERE TOWARD KLUCHI, BY THE WAY THEN, THE REPORT INDICATING THAT THEY WERE BUILDING A ROCKET BASE IN KEESUKUM ((PHON)) DESERT AT SOME PLACE, WE DIDN'T KNOW THAT IT WAS TURITOM ((PHON)) BUT WE KNEW IT WAS DURING TASHKEN ((PHOM)) AND KLUCHI WAS THE OTHER END OF IT, WAS PUBLISHED AS . IT WAS WRITTEN BT HELEN PORUS ((PHON)) NOW RETIRED, AND AT THAT TIME LAVY LT. JERRY BURKE, LATER BECAME SR. EXECUTIVE OF NSA AND FOR A WHILE WAS EXECUTIVE SECRETARY TO THE PRESIDENT FOREIGN ADVISORY BOARD, NOW RETIRED FROM NSA - JOE BURKE'S BROTHER. THEY WROTE THE REPORT, AND THAT WAS THE REPORT THAT PREDICTED THAT IT WAS GOING TO BE AN ICBM OR MSPACE TEST RANGE THERE. T: HAD SOME IN KAPUSTIN YAR, SO WE WERE FAMILIAR WITH WHAT THEY WERE. I SHOULD MENTION AS PART OF THIS THAT THE EARLY WORK AT KAPUSIN YAR DECRIPTION WORK AS I REMEMBER IT WAS IN LARGE PART THE WORK OF THE LATE MR. FRANK WALNUT ((PHON)), WIFE, BETTY, AND A.B. JONES WERE TWO OF THE PRINCLIPLE CRYPTANALYSIS. DO YOU REMEMBER ANY OF THE OTHERS, OH THE GUY WITH THE LAME ARM, HE HAD A HOARSE VOICE, HE ALSO HELPED WITH THE A.B. JONES CERTAINLY ANE FRANK WALLUT COME TO MIND AS TWO PRINCIPLE IN THE EARLY DAYS. WE'D BEEN COLLECTING THAT AT SINOP AT TRAVISONE, AND WHAT

T: CARAMISEL, TRAVISONE AND SAMSUNG, OKAY IN '55-'56 TIME FRAME. ALOT OF PEOPLE DON'T REMEMBER THIS BUT WHEN WE TALK ABOUT MISSILE ORGANIZATION, I'M KIND OF WONDERING HERE A MINUTE, BACK IN THE EARLY '50'S, IT STRIKES ME IT WAS '53, THERE WAS AN AIR FORCE GENERAL, I THINK HIS NAME WAS BURGEOUS, AT ARLINGTON HALL. HE ACTUALLY FORMED A ROCKET MISSILE DIVISION, AS PART OF THE AIR PROBLEM, HAD A ROCKET-MISSILE DIVISION. HE WAS A MAN AHEAD OF HIS TIME, WE KNEW THE GERMANS WERE IN THERE TESTING, AND HELPING THE RUSSIANS IN THEIR TESTS ON THE VOLGA ((PHON)) RIVER. WE HAD CLOWER ((PHON)) REPORTS AND HE ACTUALLY FORMED A ROCKET DIVISION, IT DIDN'T GET VERY FAR, BILL HUNT HELPED WITH IT, FORMER NSA GUY. AND THE GUY WHO WAS THE PRINCIPLE ADVISOR FROM THE

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WAS THE AIRFORCE, IT WAS ANOTHER . . .?

CIA, AND THE

C: CARAMISEL ((PHON)) | PL 86-36/50 USC 3605

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MAN WHO IN MY KNOWLEDGE IS THE OLDEST SINGLE ANALYST STILL WORKING IN THE ROCKET AND MISSILE, CAME OUT FROM CIA TO HELP WITH THE 1953 EFFORT. WE DIDN'T GET ANYWHERE IT WAS FOLDED UP AND WASN'T FORMED AGAIN UNTIL SEVERAL YEARS LATER IN THE FORM OF ANYWAY JOE BURKE HEADED THAT, HE AND RUTLEDGE TOOK OFF, WENT UP TO SEMYA ((PHON)) ISLAND, WE KNEW THE ROCKET WENT OUT THAT WAY, TO KLUCHI, TO SURVEY THE PLACE, TO DO A SIGHT SURVEY TO SEE IF WE COULD GET SOME INTERCEPT IN THERE, AND THAT OF COURSE IS WHERE WE PUT THE ARMY AND AIR FORCE STATION THERE ON SEMYA ISLAND TO PICK UP THE
OKAY, EARLY DAYS, WE HAD A FIRING OF THE
FIRST ICBM, I BELIEVE IN JUNE. WE WEREN'T QUITE SURE OF IT. WE GOT ALITTLE BIT OF TRAFFIC, HF TRAFFIC, HAD NO TELENETRY OF IT. I BELIEVE, BUT I CAN'T REMEMBER THE DATE IN JUNE, BUT IT WAS IN JUNE OF '57 BEFORE SPUTNIK WENT UP THEY FIRED AT LEAST ONE ICBM OUT THERE. IS YOUR MEMORY, FILL THAT IN?
C: I KNOW THAT THEY SENT IT UP, BUT I DON'T REMEMBER THE EXACT DATE
T: IT WAS ONE OR TWO, WE COULDN'T BE QUITE SURE, IT WAS THE SAME BOOSTER THAT PUT SPUTNIK 1 UP. I SHOULD MENTION THAT THE TELEMETRY BEING SUCH AN IMPORTANT PART OF THIS BUSINESS WAS NOT NSA'S JOB AT ALL IN 1955, '56, '57. WE GOT THAT JOB ADDED ON WITH THE ELINT, LONG ABOUT '56-'59 TIME FRAME. IT WASN'T SOMETHING NSA WANTED WE SORT OF WERE ORDED TO DO IT. DR. TORDELLA TOLD ME ONE TIME HE WISHED THEY'D TAKE THE DAYN TELEMETRY AND ELINT OUT OF HERE AND SPEND THE MONEY FOR WHAT'S NOW IT COSTS ALOT OF MONEY TO FUND THAT THING. IT LATER CAUSED ME TO GET FIRED FROM MY MESSER ((PHON)) JOB, I'LL TELL YOU ABOUT THAT. ANYWAY, CHARLIE POTTS. THE LATE CHARLIE POTTS, WONDERFUL MAN, ONE OF THE EARLY MAN IN AMERICAN RADAR WORK, WENT TO ENGLAND EARLY ON IN WORLD WAR II, DIRECTLY COMMISSIONED TO KELP THE BRITISH WITH THE RADARS AND LANDED IN D DAY TO HELP WITH THE RADAR WORK ON THE CONTINENT. SITTING HERE KNEW HIM VERY WELL, PROBABLY BETTER THAN I DID. THE AIR
FORCE AND THE ARMY WERE IN A RACE TO COLLECT THESE RADIO TELEMETRY SIGNALS
FROM THE ACTUAL ROCKET. WE HAD COMMUNICATIONS SIGNALS ALREADY AT SINOP AND TRAVISONE ALREADY BEING COPIED WHEN THEY FIRED IT. EVERYONE KNEW THERE WAS RADIO TELEMETRY ON IT, THE GERMANS TOLD US, SO EVERYBODY WAS OUT THERE LOOKING FOR IT. THE AIRFORCE SPENT THOUSANDS OF DOLLARS FOR A SPECIAL ANTENNA UP AN SAMSUNG AND TRAVISONE AND CHARLIE WAS GONE AND HE WORKED FOR THE ARMY.
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OUT IF THEY FIRE THINK A.B. JONES	O ANOTHER ONE OF THO WORKED OUT A DEAL	SE AND DID IT WORK	THEIR CHAIRS TO FIND (? SO. JOE BURKE AND I LOUIS TORDELLA
ALMOST FAINTED WITERMINATED RIGHT	HAT WE DID. WE GOT	THEN TO SET UP A R REA. WE CALLED IT	ADIO CIRCUIT THAT AN OPSCOM AND TO THE
BEST OF MY KNOWLE		NG, IT WAS THE FIR	ST ONE OF THOSE BEASTS
TELECOMMUNICATION	NS DEPARTMENT PUT TH	E TELEPRINTER RIGH	T UP IN OUR SHOP, THAT
RECEIVE MESSAGES		ON, BUT WE COULD	SEND_THEM AND WE USED
	RAW TRAFFIC IN, WHICE FIELD SITE. IN TH		UNHEARD OF
VERY JEALOUS, ARM	MY, NAVY AND AIRFORC	E WA S VERY JEAL OUS	OF THE NSA, TERRIBLY DF THEIR FIELD SITES WAS
	Y GOSH, PEOPLE WENT		
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DAY, HE WAS A REPORTERS REPORTER. THAT WAS WORTH A PRODUCT REPORT AND WE PUT A SAID. AND EVERYBODY IN THE COMMUNITY SAT ON THE EDG THEY'D HAVE A HOLD AND JOE BURKE PUT ANCTHER THIS WENT RIGHT OUT ON THE CUSTOMERS. THAT WENT ON FOR A COUPLE YEARS. LONG A WENT TO ON THE MAIN KAPUSI, YAR AND TURTON LOUIS TORDELLA CALLED JOE IN AND SAID, NOW YOU DID I YOU GUYS NOT TO PUT THOSE REPORTS OUT LIKE THAT IN R ITIT WAS IN THE NEW YORK TIMES. THAT WE WERE READI	TELETEXT TO ALL THE BOUT '62 THE RUSS ANS MISSILE TEST RANGES. T'YOU GUYS DID IT, I TOLD FAL TIME, THEY'VE LEAKED
F: LET ME STOP YOU THERE FOR A MOMENT	
((TAPE STOPPED HERE AND TURNED OVER)) F: ALRIGHT SIR	EO 3.3b(3) PL 86-36/50 USC 3605
T: IN THE EARLY DAYS I'S LIKE TO GO BACK FOR A MINU ORGANIZATIONAL ASPECT, THAT OUGHT TO GIVE YOU SOME O ORGANIZE THIS OR MAKE AN OUTLINE. IF '57 WE MOVED O BARRACKS, WE'D COME FROM ARLINGTON HALL, MOVED EVERY BARRACKS WE WERE THERE I BELIEVE WE WERE THERE WHEN BEFORE THEY FIRED SPUTNIK 1. THEY FIRED SPUTNIK AFT	F THE FEEL, AND I DIDN'T OVER HERE TO THE MARINE THING INTO THE MARINE THEY FIRED THE ICBM ER WE MOVED OVER HERE. THE SPACECRAFT UP THERE AT FRUIT FELL OUT OF THE RY CHRISTMAS HA-HA-HA AS TREMENDOUS PRESSURE ON HAVY, AIR FORCE IN THE
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SOVIET ROCKETS AND MISSILE TESTS AND THE SPACE THING. IT WAS ALMOST LIKE THE US WAS BEING ATTACKED. YOU NEVER SAW PEOPLE GET SO EXCITED. EVERYBODY WAS RUSHING AROUND GETTING THE DAMN TELEMETRY, BUYING RECORDERS PROCESSING MACHINES, EVERYBODY WAS COLLECTING TRAFFIC. WE HAD TWO BEAUTIFUL RADARS, I'M TRYING TO THINK YOU WERE AT BOTH PLACES WHEN DID THE DEFENSE DEPARTMENT PUT THAT RADAR IN THE ALBAKER ((PHON)), THAT MUST HAVE GONE IN IN
C: '55
T: '55 AND THE ONE ON SEMYA NOT TOO LONG AFTER THAT '56 OR '57
C: I THINK IN WAS '59
T: '59, I THINK IT IS VERY INTERESTING THAT WHO WAS ASSOCIATED WITH BOTH THOSE INSTALATIONS IN NOW THE CHIEF OF DEFSMAC RUNS THE WHOLE THING AND HE WAS ONE OF THE OPERATING OFFICERS ENGINEERS AT BOTH INSTALATIONS, MANY, MANY YEARS AGO. I THINK THEWELL, ON THE ORGANIZATIONAL STANDPOINT, DR. RUTLEDGE AND BURKE WENT UP THERE AND HELPED THE ARMY AND AIR FORCE HELPED SET THE INTERCEPT SITE UP ON SEMYA THEY GAVE US ADDITIONAL TIP-OFFS. THE
EO 3.3b(3) PL 86+36/50 USC 3605
RECORD BUT IT'S PART OF THE RECORD, BUT IT'S AS EARLY ON AS WE COULD, OF COURSE THE AIRCRAFT NEEDED TIP-OFF THE EARLY ORGANIZATION, NSA AND IT'S VERY FUZZY IN MY MIND WHO SHOULD BE CREDITED MAYBE JIM HILLMAN SITTING BESIDE ME AS TO WHO SHOULD BE CREDITED WITH SETTING UP THE SMAC, A SPECIAL MISSILE AND ASTRONAUTICS CENTER WITHIN THE NSA, WHO WAS THE DRIVER WHO DID THAT. I KNOW NEIL CARSON WAS INVOLVED IN IT, LEO EMERY
C OR HILLMAN: LEO EMERY
T: LEO EMERY I GUESS WAS ONE OF THE KEY MEN
HILLMAN: HE WAS HEAD OF THAT ANALYTIC TEAM
T: THAT'S RIGHT. LEO, AS FAR AS I KNOW IS STILL OVER IN LAUREL, AND IS A SUCCESSFUL BUSINESS MAN. LEO STICKS IN MY MIND AS DOING THE EARLY ANALYTICAL WORK IT WASDIA HADN'T JOINED US YET IT WAS A SPECIFICALLY AND A VERY PRACTICAL THING. THE IDEA WAS TO TRY TO GET EARLY WORK, AN EARLY FEEL FOR WHEN THEY WERE GOING TO SHOOT SO THAT WE COULD GET ALL THE STATIONS AT LEAST TO COLLECT THE COMMUNICATIONS TRAFFIC AND THEN LATER ON TIP-OFF TOSO THE RADAR SITES WOULD BE ABLE TO SEE THE MISSILE. THAT WAS: DONE EARLY ON.
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F: CHARLIE A QUESTION I THINK HELEN WANTS AN ANSWER TO IS...WHAT WAS THE MAJOR REASON FOR THE ESTABLISHMENT OF THE SMAC?

T: WELL, I THINK IT WAS, THAT IS WHAT I WAS TRYING TO START TO ADDRESS. IT WAS A NATURAL EVOLUTION FIRST OF ALL THE EARTH BEING ROUND AND THE RUSSIANS LIKING TO WORK WHEN IT WAS LIGHT OVER THERE, THE TESTING OF THESE MISSILES AND THE FIRING OF THE SPACECRAFT DIDN'T OCCUR WHEN IT WAS NICE WORKING HOURS HERE. SO, AT FIRST WE USED ENTIRELY A CALLING SYSTEM, I DON'T THINK WE HAD ANY DUTY OFFICER AT ALL AT FIRST. WHEN THE MESSAGE WOULD COME IN THE COMMUNICATIONS PEOPLE HAD A LIST AND THEY WOULD CALL IN PEOPLE AND THAT BECAME MORE FREQUENT AND I GUESS PROBABLY THE FIRST STEP WAS THE ESTABLISHMENT OF SOME SORT OF DUTY OFFICER, BUT I HONESTLY DO NOT REMEMBER. IT WAS BUILT AROUND THE NEED TO MAINTAIN AND OPERATE THESE OPSCOMMS. NOW AT FIRST. THESE OPSCOMS DID NOT OPERATE ALL THE TIME, BY ANY MEANS, THEY WERE CALL UP CIRCUITS AND WE HAD VERY VERY HEAVY CAVEATS THAT YOU COULD NOT USE THEM TO GIVE ORDERS OR ANYTHING LIKE THAT, THEY WERE STRICTLY FOR THE AND TIF-OFFS. WE HAD THEM TO SINOP AND TO EXCHANGE OF SEMYA AND THE ALBEKER ((PHON)) AND THEN WE ADDED OTHER STATIONS AS WE WENT ALONG. THE ORIGINAL SMAC WAS A PRACTICAL THING, IT GREW OUT OF THE NEED TO BE ABLE TO GO TO WORK IN A BIG HURRY TO ENSURE COLLECTION, TIP-OFFS AND TO HELP THE READERS NSA ONLY IN ORDER TO GET OUR JOB DONE TO COLLECT TRAFFIC AND OF COURSE BECAUSE OF THE REPORTING PRESSUE ON US TO WRITE A QUICK REPORT. OKAY. NOW ONE OF OUR PRINCIPLE PRESSURE POINTS AND CUSTOMERS YOU MIGHT BELIEVE WAS THE UNITED STATED AIR FORCE. THEY WERE THE ONES INCHARGE OF OUR ICBM PROGRAM. THEY PUT ALOT OF PRESSURE ON US AND THEY HAD ESTABLISHED AS PART OF THEIR INTELLIGENCE REPORTING AND ANALYSIS SHOP A LITTLE GROUP CALLED OFSA. JIM HILLMAN WAS A MEMBER OF THAT ALONG WITH DON COLELLA AND ((PHON)) AND NOW YOU HAVE TO FEMEMBER THAT THEY REPRESENTED THE UNITED STATES AIR FORCE INTELLIGENCE PEOPLE. THEY WROTE INTELLIGENCE REPORTS, NOT SIGINT REPORTS LIKE THE ORIGINAL SMAC, WHICH I THINK WAS UNDER AT THAT TIME. BEING HEADED BY WE HAD A PROGRAM THOSE DAYS WHERE CIA PEOPLE COME OVER AND ACTUALLY HEAD NSA UNITS. WE GAVE IT UP, IT IS UNFORTUNATE, FOR SOME REASON. IT WAS TO BE EXCHANGED BUT IT NEVER HAPPENED. WE HAD A SUCCESSION OF FOUR SENIOR CIA OFFICIALS WHO CAME OVER, IT WAS TO HELP PREVENT POLITICAL BATTLES RETWEEN VIA AND NSA ON MISSILE AND SPACE MATTERS. THE FIRST OF THOSE WAS (PHON) AT ARLINGTON HALL. HE WAS MY BOSS IN THE MISSILE AND INDUSTRIAL BUSINESS. ANYWAY, MORE ABOUT OFSA, TELL US JIM. HILLMAN: WELL, IT WAS A FASCINATING PLACE, BECAUSE WHAT WE DID IS WE KIND OF SCIMMED THE CREAM OFF THE REPORTING THAT NSA WAS DOING AND AS CHARLIE SAID TURNED IT INTO AN INTELLIGENCE PRODUCT. WE WERE ABOUT THE ONLY PEOPLE PROBABLY IN THE WORLD DOING THAT. THE ARMY DIDN'T HAVE ANYTHING LIKE THAT OR NAVY... CIA DIDN'T HADN'T EVEN STARTED THAT YET, PHONSEC WASN'T BORN YET. HILLMAN: SOMEHOW WE HAD A COLLECTION OF WHAT I CONSIDERED THE PL 86-36/50 USC 3605 PL 86-36/50 USC 3605

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BEST AIR AND MISSILE ANALYSTS THAT REALLY EXISTED IN THE COMMUNITY.

T: ONE THING, THEY BROUGHT TO IT THE TIP-OFF BUSINESS THAT I REMEMBER DISTINCTLY IN THOSE DAYS IS THAT ONE OF THE CLUES THAT THEY WERE GOING TO SHOOT SPACESHIPS, MISSILES AND SO ON WAS THAT IN THOSE DAYS

THEY OFTEN CAME IN TO SMAC. THIS WAS BEFORE WE FORMED DEFSMAC AND TOLD US

BUT

WHAT THE HELL THE IMPLICATIONS OF SOME CF OUR REPORTING WERE, BECAUSE THEIR JOB WAS TO TAKE THE NSA REPORTS OUT AND PUT THEM INTO A MORE FINISHED INTELLIGENCE VERSION. SO, THE OFSA PEOFLE WERE WELL KNOWN TO ALL OF US IN THE SMAC ORGANIZATION AND LATER ON WE STOLE THEM AND I'LL TELL YOU ABOUT THAT IN A MINUTE. ONE OF THE THINGS THAT I REMEMBER ABOUT THE SMAC DAYS IS PEOPLE WERE SO EXCITED ABOUT THESE MISSILE SHOCTS AND ROCKETS IN THE SOVIET UNION BECAUSE OF THE GAP THAT SUPOSEDLY EXISTED. BUT EARLY ON IN THE GAME VERY SENIOR PEOPLE IN THE GOVERNMENT WOULD COME OUT TO NSA, WELL NSA DIDN'T HAVE NSOC, WE HADN'T EVEN HAD THE CUBAN MISSILE CRISIS YET WHICH REALLY CAUSED US TO FORM NSOC LATER ON. AND SO, WHAT'S TO SHOW OR TELL ABOUT NSA, HAD A FEW SEXY LOOKING EXPERIMENTS GREEN GOLD, I REMEMEBER BILL CROLL ((PHON)). USED TO TAKE SOME OF THE GUESTS AROUND AND SHOW THEM SOME OF THE OPTICAL EXPERIMENTS DOWN THERE, BUT THERE REALLY WASN'T MUCH, IT WAS SORT OF BORING, YOU WALKED THROUGH THE PLACE AND THERE WASN'T REALLY ANY SORT OF WATCH CENTER OR ANYTHING LIKE THAT. WELL, WE HAD THESE SEXY ROCKETS DOWN HERE SEE, AND SO WE SET UP SOME BRIEFINGS AND I REMEMBER ONE WHERE WE WOULD START OUT WITH THESE VIEW GRAPHS AND WE'D START WITH THE COUNT DOWN, JIM YOU REMEMBER THOSE? 'SHOW THEM WHERE THE TRAFFIC CAME FROM THEN WE HAD A PICTURE OF A ROCKET AND WE'D EXPLAIN THE TIP-OFF AND THEY THOUGHT IT WAS MIRACULOUS THAT WE COULD PREDICT THEY WERE GOING TO SHOOT BEFORE THEY SHOT. THE SOVIETS HAD TO GO THROUGH SO MUCH PREPARATION, SO DID THE US, OUR COUNTDOWNS ARE JUST AS LONG. BY THAT TIME WE HAD LEARNED THAT ONE OF THE BEST THINGS TO DO WAS TO SEND OUR PEOPLE DOWN TO CAPE CANAVERAL TO SEE WHAT ROCKETS LOOKED LIKE AND HOW YOU SHOT THEY AND THE COMMUNICATIONS ETC. ETC. WE HAD A WHOLE STREAM OF GUYS IN FACT ONE TIME WE EYEN RENTED/BOFROWED AND AIRFORCE AIRPLANE AND TOOK

H-LLMAN: YES

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A WHOLE PLANE LOAD DOWN THERE, DO YOU REMEMBER THAT JIM?

T: THAT'S WHEN MAX MITCHELL CAME TOO. TO TEACH PEOPLE THE WHOLE PROCEDURE OF FIRING SPACECRAFT AND ROCKETS, WE SENT LOTS OF PEOPLE TO CAPE CANAVERAL TO SEE THE PROCEDURES AND LEARN THEM. ORGANIZATIONALLY I THINK TO ANSWER YOUR QUESTION, THE ORIGINIZATION CAME FROM THE NEED TO OPERATE 24 HOURS A DAY DIFFERENTLY FROM FIELD STATIONS. WE IN EFFECT HAD TO DO REPORTING LIKE A FIELD STATION WAS DOING. IN THOSE DAYS FIELD

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STATIONS WORKED 24 HOURS A DAY, COLLECT FRAFFIC, WRITE REPORTS, NSA DIDN'T, BY AND LARGE WORK 24 HOURS A DAY. BUT WE DID IN DEFSMAC BEGIN TO DO THAT BECAUSE OF THE NUMBER OF FIRINGS THAT THE SOVIETS WOULD HAVE. I GUESS PROBABLY THE REASON FOR THE ACTUAL ESTABLISHMENT OF DEFSMAC GREW OUT OF THE FACT THAT WE GOT SO TIRED OF GETTING CALLED IN AND STAYING HERE FOR SOMETIMES I' BE HERE FOR THREE OR FOUR DAYS, AND SOME OF THE OTHER MEN WOULD BE HERE FOR THREE OR FOUR DAYS BECAUSE THEY WOULD CANCELL THE SHOT AND THEN THEY WOULD START THE COUNTDOWN AGAIN. I GUESS I COULD DO A BETTER JOB OF ANALYSING THIS IF I HAD THE RECORDS AND I DOUBT THAT IN THOSE DAYS WE WROTE JUSTIFICATIONS FOR WHY WE SET IT UP. IT GREW OUT OF THE FACT THAT WE HAD SO MANY SHOOTS PEOPLE GOT TIRED OF COMING IN, THAT WE DECIDED TO SET UP A WATCH OFFICER AND THEN A GROUP OF WATCHERS. WE ALWAYS DID USEHAVE A CALL-IN PROCEDURE IN SMAC. MUCH HEAVIER THAN DEFSMAC. WE WOULD HAVE A FEW PEOPLE THERE, WATCH OFFICERS AND THEY WOULD CALL IN
F: GOOD, DID YOU GET MANY NEW SOFICTICATED EQUIPMENTS THAT WERE DEVELOPED AS A RESULT OF YOUR NEEDS THAT YOU HAD TO CONTRACT OR PROGRAM OUT TO VARIOUS ELECTRONIC ORGAINZATIONS?
T: NO. NOT THAT I THE ONLY THING THAT WE DID IN SMAC. I GUESS I'M RESPONSIBLE FOR THE DEVELOPMENT OF IT IN NSA, I DIDN'T INVENT IT I'D GIVE DUE CREDIT IF I KNEW THE GUYS NAME.

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IT WAS: NOT MANY PEOPLE REMEMBER THAT AND THAT'S WHY I SHOULDN'T DWELL ON IT. I STARTED TALKING A LITTLE BIT ABOUT THE BRIEFINGS. WE WERE DRIVEN TO IT BY NEED TO MAINTAIN A WATCH TO GET THINGS GOING SO THAT WE COULD HAVE SOMEBODY THERE TO SOPHISTICATED TO CALL IN PEOPLE. SO IT BEGAN WITH A VERY SMALL GROUP OF TWO OR THREE PEOPLE IN THE WHOLE COMPLIMENT. SOMETIMES WE HAD DAYS TIP-OFF I: ADVANCE WHERE WE'D HAVE THE AIRCRAFT AND THE GUYS WOULDN'T EVE: GO HOME AT NIGHT THEY'D JUST STAY ON BECAUSE YOU WERE SO SURE THEY WERE POSSITIVE. DR. TORDELLA AND THE DIRECTORS WOULD EXING THE PEOPLE DOWN THEY WERE WE'D OTHERS WHO WOULD COME OUT AND THEY WO'LD BE BROUGHT DOWN THERE TO SEE WHERE WE'D FOLLOW THE RUSSIAN TIP-OFF, SO I DECIDED TO DO A LITTEL PR SO WE MADE SOME FANCY SLIDES, FIRST WE'D SHOW WHAT THE RUSSIANS WERE DOING THEN WE'D SHOW THE INTERCEPT SIDE AND THIS AND THAT AND SO ON. I GUESS THE GUY WHO REALLY CAUSED US TO GO INTO THE PR BUISINESS IN ONE DAY THIS STRANGE ITALLIAN FELLOW CAME DOWN HERE, I DIDN'T KNOW HIM, HE WAS AN ASSISTANT SECRETARY OF DEFENSE, HIS NAME WAS GANE FORBINNI ((PHOR)) AND HE WAS TOURING WITH SOME GROUP OUT HERE AND HE CAME

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BY TO SEE THIS. OH MY HE GOT SO EXCITED, I GAVE THE BRIEFING THAT DAY, HE GOT ALL EXCITED WENT DOWN AND TOLD A BUNCH OF PEOPLE IN THE E RING ((PHON)), BOY THAT WAS TOO BAD BECAUSE AFTER THAT WE HAD A CONSTANT STREAM OF VISITORS. WE COULD HARDLY WRITE THE REPORTS WITH ALL THESE PEOPLE COMING IN. THEY'S COME WITH VERY LITTLE NOTICE, LOUIS TORDELLA AND THESE OTHER PEOPLE WOULD BRING THEM DOWN THERE TO SHOW THEM THIS MISSILE CENTER. IN THOSE DAYS IT ISN'T LIKE NOW, I MEAN IT'S HUM-DRUM, YOU KNOW WE'VE LANDED ON THE MOON AND EVERYTHING ELSE, BUT IN THOSE DAYS IT WAS REALLY EXCITING ESPECIALLY WHEN THE RUSSIANS FIRED UP A NEW SATELLITE, WE DIDN'T HAVE ANY SATELLITES UP THERE IN THE BEGINNING. SO THEN NEIL CARSON DID ALOT TO HELP WITH THE MODERNIZATION OF SOME OF THE IDEAS AND THINGS THAT WE DID IN THE SHOP THERE. THERE WERE JUST SO MANY PEOPLE, JOE AMANO ((PHON)) WAS THE HEAD OF REPORTING DOWN IN DOWN THERE, HE SUPPORTED US. WE NEVER DID THE RESEARCH TYPE REPORTING ANYMORE THAN WE DO TODAY. WE DID ONLY THE QUICK REPORTING AT NSA, THE INTELLIGENCE COMMUNITY THROUGH NAFSOP ((PHON)) DID THE FOLLOW-ON REPORTING. IT WAS ALMOST PURELY TIP-OFF AND COLLECTION, OF COURSE WE LIVED ON THE EDGE OF THIS SWORD OFLIKE I REMEMBER ONE TIME THIS WAS WHEN WE WERE STILL OUT ON THE OTHER BUILDING,
AND HE CALLED ME UP ONE DAY AND WE'D JUST GOTTEN WORD THAT WE'D JUST LOST AN AIRCRAFT OVER THE BLACK SEA. A B57F, FLEW OUT OF ADONNA ((PHON)) AND I KNEW THE AIRCRAFT WAS LATE, I DIDN'T KNOW WE'D LOST IT AND NOBODY KNEW IT WAS LOST FOR GOOD, AND HARRY CALLED UP ON THE PHONE AND SAID, "I WANT YOU TO GET A CIRCUIT UP WITH ADONNA, I WANT TO TALK TO THE COMMANDER OUT THERE." THE SAC UNIT THERE, I SAID THAT'S FOR TIP-OFF PURPOSES ONLY, AND I CAN'T DO THAT. HE SAID TO GO AHEAD AND DO IT ANYWAY AND HE'D GIVE ME THE MESSAGE. THE SAID JUST TYPE THIS: TOLD NOW I KNOW THAT YOU REQUEST THAT THE AIR COMMANDER THERE GIVE THEM EXACTLY STATUS IN THE PENTAGON OF THAT LOST AIRCRAFT WAS OVERDUE. HON MUCH FUEL AND HOW MUCH CHANCE IT HAD IN THIS THAT AND SO ON. AND TO REPLY PRONTO VIA DEFSMAC SEE, OKAY? SO I SEND IT. A NAVY COMMANDER, LATER A CAPTAIN. WAS THERE HOLDING MY HAND, WE USED LOTS OF NAVY OFFICERS IN THE EARLY DAYS OF BOTH SMAC AND DEFSMAC, BECAUSE THEY ARE SO WELL TRAINED BOTH IN INTELLIGENCE AND COMMUNICATIONS. WE HAD A COMMUNICATION PROBLEM PROBABLY MORE THAN WE DID IN MANY RESPECTS INTELLIGENCE PROBLEM: SO ANYWAY I SENT THE MESSAGE OUT AND THE ANSWER CAME BACK VERY PROMPTLY, THEY COULDN'T GET THROUGH FROM THE PENTAGON. AND WHILE THAT WAS GOING ON I LET HANDLE THAT I RAN UPSTAIRS AND COPIED THE TELEDIRECTORY, BECAUSE I WAS ABSOLUTELY CERTAIN THE AIRFORCE WAS LECAUSE WE'D NEVER DONE ANYTHING LIKE THAT. I DON'T
KNOW IF IT'S A MATTER OF RECORD OR NOT
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COME IN BRIGHT AND EARLY MONDAY MORNING AND I DON'T EVEN KNOW THIS HAPPENED. GUY'S NOT HERE. THERE'S A PHONE MESSAGE TO GO TO THE ADMIRAL'S OFFICE, I DIDN'T KNOW WHAT THE HELL FOR. I WENT TO THE ADMIRAL'S OFFICE, AND I CAN'T REMEMBER, IT SEEMS TO ME THAT THE ADMIRAL'S OFFICE/DIRECTOR'S OFFICE WAS STILL OVER IN THE LITTLE BUILDING, I DON'T BELIEVE THEY'D BUILT THE HIGH BUILDING YET. AND THE ADMIRAL WAS IN THERE AND THEY AID TOLD ME TO GO ON IN THERE. SO I DID. HERE'S THIS NAVY CAPTAIN IN THERE STANDING AT ATTENTION. ADMIRAL FROST WAS SITTING DOWN AND THE KAVY CAPTAIN STANDING AT ATTENTION AND HE HAD A BIG TUMMY AND WHEN HE STOOD AT ATTENTION IT MADE HIS STOMACH STICK OUT. I DIDN'T KNOW WHAT TO DO, SO I STCOD AT ATTENTION TOO, TO FIND OUT WHAT THE HELL WAS GOING ON. SO THE ADMIRAL COULD DO THE BIDDING FOR ME. NOW AT THAT TIME THIS WAS A CIVILIAN SHIP AND IT WAS THE ONLY SHIP THAT THIS ADMIRAL HAD THE CHOP ON AND IT WAS HIS SHIP TO TELL IT WHERE TO GO, SEE? HE'D SENT THE MESSAGE OUT EARLIER IN THE WEEK TOLD IT TO GO TO LATITUDE AND LONGITUDE SO AND SO. THE NAVY CAPTAIN, MY GUYS ALVISING THEM HAD TOLD THE SHIP TO GO SOMEWHERE ELSE. AND THAT WAS BAD ENOUGH, BUT THE REALLY BAD PART OF IT WAS THAT THEY HAD THE LATITUDE AND LONGITUDE SCREWED UP AND THERE WAS NO SUCH LONGITUDE AS THIS, OKAY? EITHER THAT OF IT WAS DRY LAND, I CAN'T REMEMBER WHICH. AND THAT WHAT REALLY GOT HIM SO HOT, NOT ONLY HAD WE CHANGED HIS ORDERS BUT WE MADE IT GO TO SOMEPLACE. FUT THE SHIP CAME BACK OUESTIONING THE ORDER BECAUSE THE LATITUDE AND LONGITUDE WERE WRONG. THAT GOT IN HERE ABOUT MONDAY AND IT WAS ON THE ADMIRALS DESK AND HE WAS WAVING IT LIKE A SIGNAL FLAG. WHEN I GOT IN THERE HE WAS SAYING TO THE CAPTAIN, "NOW TELL ME AGAIN WHAT YOUR DUTY HOURS ARE" THE CAPTAIN HAD JUST TOLD HIM THEY WERE FROM 0800-1600. "TELL ME AGAIN CAPTAIN WHAT YOUR DUTY HOURS ARE, I DIDN'T HEAR THAT" NOW THE CAPTAIN CAUGHT ON AND HE ANSWERED BACK "0000-2400 HOURS SIR." SO, I KNEW THE ANSWER WHEN HE ASKED ME. "MR. TEVIS" HE SAID, "I THOUGHT YOU GUYS DOWN THERE IN DEFSMAC HAD BETTER SENSE THAN TO SEND A MESSAGE OUT TO A SHIP LIKE THAT. " AND I SAID WELL, SIR I THOUGHT WE DID TOO. HE SAID THAT HIS OPINION OF US IN SMAC HAD REALLY GONE DOWN. I DIDN'T KNOW ANYTHING ABOUT THIS, BUT I DIDN'T TELL HIM, I DIDN'T SIGN THE MESSAGE, BUT YOU COULD LOOK AND SEE THAT I WAS RESPONSIBLE, OKAY? SO WE STOOD THERE WHILE THE ADMIRAL TOLD US IN SIX WAYS TO SUNDAY ABOUT HIS SHIP, DON'T EVER TELL A SHIP TO GO SOMEWHERE ELSE UNTIL YOU GET THE GUY WHO OWNS THE CHOP ON IT'S PERMISSION.
SO I'M TELLING YOU THAT IF YOU EVER GOT AN ADMIRAL AND HE'S THE SO I'M TELLING YOU THAT IF YOU EVER GOT AN ADMIRAL AND HE'S THE DIRECTOR OF NSA AND INCHARGE OF A SHIP, DON'T CHANGE WHERE THAT SHIP'S GOING WITHOUT HIS PERMISSION. NOW THE COMMISSION WAS FORMED....THE WHOLE MISSILE SPACE INTELLIGENCE BUSINESS WAS GOING WILD BY THE SUMMER OF '63, '62-'63. HAD THE ARMY, NAVY AND THE AIR FORCE; NSA & NOW IN THE ACT, ALL COLLECTING RADIO SIGNALS AND RADAR, YOU NAME IT MISSILES. NEARLY ALL WERE DOING THE TELEMETRY PROCESSING, WRITING REPORTS, OKAY? NSA WAS DOING A FAIRLY GOOD JOB ON PART OF LBUT BECAUSE OF THE TELEMETRY ASPECTS, WE PUT OUT A GOOD SIGINT REPORT, BUT SMAC, PURE SMAC, HAD VERY LITTLE IDEA WHAT TO DO ABOUT THE TELEMETRY SIDE OF IT, OKAY? I DON'T REMEMBER WHETHER WE EVEN, I GUESS WE PUT WHAT SIGNALS WERE UP FROM A TRAFFIC ANALYTIC STANDPOINT AND AFSOC ((PHON)) PROBABLY TAUGHT US THAT. AND FORBINNI HAD HEARD ABOUT IT, AND REMEMBER HE'S DOWN THERE IN THE PENTAGON, SO THEY

OGA

THAT WHY THEY SCREWED IT SO BADLY, THEY DIDN'T HAVE GOOD ENGINEERING ADVISE. THE MATHEMATICIANS WENT AND BOUGHT RECORDERS. GOD THAT WAS TERRIBLE. ANYWAY, FRANK RAVEN WAS STILL THE BOSS OF ANDY HERSHAW ((PHON)) HAD PASSED ON AND GUY STEVENS AND I WERE IN . NO BOY WERE WE HIRING THESE ENGINEERS TO RUN THE TELEMETRY, 'CAUSE WE DIDN'T KNOW ANYTHING ABOUT TELEMETRY. HIRED HRB TO RUN TO TEACH US A LITTEL BIT, REMEMBER THAT OKAY? AND I WAS HIRING THESE GUYS LIKE MAD AND FRANK RAVEN WHO WAS A CRYPTANALYST ALLOWED ME TO. HIRED A HELL OF A LOT OF THEM IN A HURRY, OKAY, AND PAID THEM GS-9s. MAN THAT WAS UNHEARD OF. SOME 7, BUT MOST AS 9s. ONE DAY I THINK IT WAS ABOUT THE SPRING OF '63 OR ALONG IN THERE. GUY STEVENS AND I GOT FIRED THE SAME DAY. WE GOT ROTATED, BUT IT HAPPENED THE SAME DAY, AND THERE WERE NO GREEN SLIP OR ANNOUNCEMENT OR ANYTHING. JUST BOOM WE'D HAD IT. NOBODY WOULD EVER REALLY SIT DOWN AND TELL US WHY, JOHN DAVIS WAS CHIEF OF DDO OR PROD AT THE TIME. HE SAID THAT LOUIE GOT, UNCLE LOUIE, MY FRIEND DR. LOUIS TORDELLA, AND HE IS MY FRIEND, I USED TO CARPOOL WITH HIM. HE DIDN'T CALL US UP THERE, BUT DAVIS TOLD US WHY, AND IT WAS JUST THAT WE'D HIRED TOO MANY PEOPLE TOO FAST AND IT WAS EATING INTO THE CRYPTOANALYTIC BUDGET, OKAY? WE HAD AFFRONTED THE CRYPTO CURIA, OKAY? GUY GOT MOVED TO THE BEAN COUNTING JOBS AND I GOT PUT ON SOME HORRIBLE THING CALLED THE SIGINT COMMITTEE. GOD ALMIGHT I'VE NEVER MET SUCH REUROCRATS! IN MY LIFE, THAT WAS TEMPORARY FORTUNATELY, SO, JUST BEFORE THAT HAPPENED BY THE WAY I SHOULD TELL YOU SOMETHING, MAYBE A LESSON FOR SOMEBODY IN DEFSMAC. WE HAD ALL ADMIRAL IN CHARGE OF THE AGENCY THAT SUMMER, HIS NAME WAS ADMIRAL FROST, A IN DEFSMAC. WE HAD AN NICE GUY, HE WAS ALITTLE BIT OLD, BUT HE WAS A NICE GUY, BUT I'LL TELL YOU ONE, HE STILL HAD HIS MARBLES 'CAUSE GUY WENT ON VACATION, OKAY? AND WE HAD SOME SORT OF SPACE SHOOT, RUSSIAN SHIPS IN THE SOUTH ATLANTIC, SOMETHING LIKE THAT AND WE'D ORDERED THIS AND WHAT IS NOW _____ I DON'T KNOW WHAT THEY WERE CALLED THEN. THEY HAD THIS SHIP WITH A MILD CRISIS OFF OF AFRICA AND THIS SHIP HAD BEEN ORDERED BY THE ADMIRAL UNDER THE! DIRECTORS SIGNATURE, ALL MESSAGES WENT OUT THAT WAY, TO GO DOWN TO THIS SOUTH AFRICAN REVOLUTION TO COLLECT TRAFFIC. IT WAS A WEEKEND TRIDAY, AND GUY HAD GOVE ON VACATION, WE WERE STILL AT SMAC, NOT DEFSMAC. BY GOLLY THE RUSSIANS STARTED POSITIONING SOME OF THEIR SHIPS FARTHER UP THE COAST OF AFRICA AND THEY WERE GOING TO HAVE A SPACE SHOT OR SOMETHING. SMAC SAID THAT THEY NEEDED THIS SHIP, THIS CRISIS SHIP UP THERE TO COLLECT SOME RADIO SIGNALS !... ((TAPE STOPPED HERE FOR FARLEY TO ADVISE TEVIS TO LIMIT HIS COMMENTS)) T: I DIDN'T KNOW THAT THIS WAS GOING ON BUT LATE THAT FRIDAY NIGHT, THE DEFSMAC DUTY OFFICER GOT IN TOUCH WITH WHATEVER WITH COLLECTION, THERE WAS A NAVY CAPTAIN DOWN THERE, A STG HEAVY SET FELLOW, I CAN'T REMEMBER HIS NAME, REALLY HEAVY SET FELLOW: THEY'D SENT A MESSAGE OUT TO THIS CRISIS SHIP WHERE THE CRISIS IS REALLY RUN, DOWN ANYWAY TO TAKE OFF AND GO TO A NEW PLACE OFF AFRICA AND COLLECT THIS SMAC NEEDED SPACE SHIP STUFF, OKAY? AND THIS CAPTAIN IN THIS COLLECTION UNIT SIGNED OFF ON THE COLLECTION AND ACTUALLY SENT A COURSE CHANGE FOR THE SHIP. PL 86-36/50 USC 3605

CREATED MACDEMARA ((PHON)) I DON'T KNOW WHO TOLD THEM TO DO THIS, CREATED A COMMISSION TO STUDY/ REVIEW THE WHOLE DEFENSE DEPARTMENT'S EFFORT IN MISSILE AND SPACE INTELLICENCE, NOT JUST TELEMETRY. I WAS NAMED AS PART OF THAT GROUP, GENE FORBINNI WAS ON IT, THE LATE JACK O'GERRA ((PHON)) OF AXI ((PHON)) WAS ON THAT,

THE LATE DAVE CARR ((PHON)), HE WAS AN AIR FORCE SENIOR INTELLIGENCE ANALYST

I CAN NOT REMEMBER...FORBINNI, O'GERRA, MYSELF, WALACE WINKLER OF ARMY, I'M SURE THERE'S A RECORD OF ALL OF THIS. WE STARTED AND CAME TO NSA. WE LOOKED AT EVERYTHING THAT SMAC WAS DOING, WHAT NSA WAS DOING, WHAT THE AIR FORCE, THE ARMY, AIR PRICE IN THE COUNTRY, VISITED NORAD, WE WERE AT NORAD AND CONDUCTING OUR REVIEW ON THE DAY WHEN PRESIDENT KENNEDY WAS ASSASSINATED. THAT'S PERHAPS I MISUSED COMMUNICATIONS BECAUSE THE J2 WAS CHAIRING OUR MEETING AT NORAD. TALL AIR FORCE GENERAL, TRIED TO GET THROUGH, AS SOON AS THE ASSOCIATED PRESS CAME THROUGH WITH THE NEWS, TO OMAHA, TO GET FURTHER INTELLIGENCE, I DON'T KNOW WHY HE HAD TO GET THROUGH TO OMAHA. THE CIRCUIT TO OMAHA WAS OUT, MICROWAVE WAS DOWN, AND HE COULDN'T GET THROUGH TO WASHINGTON ON A TELETYPE MACHINE, OKAY? I RUSHED UPSTAIRS TO THE CIRCUIT THAT SMAC MAINTAINED DAY AND NIGHT TALK CIRCUIT. OKAY? I SAT DOWN AT THE CIRCUIT. BECAUSE THEY WERE VERY CONCERNED AT NORAD WHETHER THERE WAS FOREIGN INVOLVEMENT IN THE ASSASSINATION, OKAY? DON'T EVER LET ANYONE TELL YOU THAT DEFSMAC HAS NEVER BEEN INVOLVED IN ANY OTHER CRISIS BESIDES MISSILE AND SPACE, BECAUSE I SAT DOWN AT THE TELETYPEWRITER, WITH THE AID OF A SGT. AND CALLED THE SENIOR; GUY IN WHO WAS CONCERNED WITH SUCH MATTERS, ((PHON)) AT THE;
TIME, TO GO DOWN TO THE CIRCUIT DOWN THERE AND I ASKED HIM A SIMPLE QUESTION, WHICH WAS WHAT J-2 WANTED TO KNOW, "WHAT'S GOING ON IN THE SOVIET UNION?"! AND WE GOT A VERY QUICK AND VERY BEAUTIFUL RESPONSE, I SUPPOSE WE'VE THROWN IT

AWAY BECAUSE IT WASN'T RECORD TRAFFIC.

AND I TOOK THAT ANSWER BACK WITHIN 10 MINUTES TO J-2 NORAD AND HE TOOK IT RIGHT INTO THE CINC AND THAT WAS THE ONLY INTELLIGENCE REPORT THEY HAD ON POSSIBLE FOREIGN INVOLVEMENT AT THAT TIME ((LAUGHS)) ANYWAY, THE COMMISSION WENT ON TO THE WEST COAST, WE TALKED TO INDUSTRIAL GROUPS, WHO WERE HELPING THE ARMY, NAVY AND AIR FORCE WITH TELEMETRY ANALYSIS, WE WENT TO VSL ((PHON)) WE WENT TO AEROSPACE, TRW, ALL THOSE KIND OF GROUPS. BUD WHEELON ((PHON)) THAT TELLS YOU HOW LONG AGO IT WAS, WAS STILL OUT THERE HEADING AN INTELLIGENCE TANK ON THE WEST COAST, HE HADN'T COME TO THE CIA YET. CARL DUCKET HAD VERY RECENTLY BEEN APPOINTED BY MCCMAN, DIRECTOR OF CIA, TO COME TO CIA AND THEY HAD FORMED A MISSILE CENTER CALLED FUMSAC ((PHON)) AT CIA, FORBINNI HEARD ABOUT THAT. WHEN WE GOT BACK, THEY WROTE A REPORT, I DID NOT HAVE TO PARTICIPATE IN THE REPORT WRITING, I CAN'T REMEMBER WHETHER ED WINN WAS A MEMBER OF THAT COMMISSION OR NOT, I DON'T BELIEVE HE WAS, HE HELPED WITH THE FINAL REPORT IN DIA...ANYWAY, THEY WROTE A REPORT AND IT MADE A NUMBER OF RECOMMENDATIONS, ONE OF THE RECOMMENDATIONS WAS THAT THEY FORM A MISSILE CENTER IN THE DEFENSE DEPARTMENT, AND THAT WAS ONE OF THE THINGS THAT WAS DONE.

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THEY ALSO MADE SOME RECOMMENDATIONS THAT HAD TO DO WITH THE CENTRALIZATION OF THE TELEMETRY PROCESSING MATTERS WHICH GAVE MORE FORCE TO THE T-BACK CONCEPT...TO NSA'S ROLE IN CENTRALIZE TELEMETRY PROCESSING, DEFSMAC WAS FORMED, AND FOR THE FIRST TIME WE HAD AN ORGANIZATION, WHICH WAS AN INTELLIGENCE ORGANIZATION RATHER THAN JUST A PURELY SIGINT ORGANIZATION. IT WAS PARTLY DONE TO BALANCE THE WORK, I GUESS THAT'S A POLITE TERM IN CIA. CARL DUCKET, WHO WAS THE HEAD OF FUMSAC AT THAT TIME, HE HAD NOT YET BECOME THE DEPUTY DIRECTOR, HE WAS A LONG TIME MEMBER OF THE MISSILE COMMUNITY IN THE ARMY.

F: CHARLIE HOW MUCH OF AN EXPANDED MISSION DID DEFSMAC ASSUME

T: WELL, IT HAD A LARGER ROLE BECAUSE IT MADE OFFICIAL A REQUIREMENT THEY WRITE AN INTELLIGENCE REPORT BASED ON THE RADAR DATA AND SO ON. THEIR NECK WAS OUT AFTER THAT AS PRELIMINARY REPORTING ON ALL THE MISSILE SHOTS AND SORT OF CONTINUOUS REPORTING ON THE SPACE OPERATIONS, IT GAVE MORE RESPONSIBILITY TO THEM AS FAR AS IT FORMALIZED THEIR TIP-OFF AND GUIDANCE WORK THEY DID WITH THE OTHER SENSORS IN THE DEFENSE DEPARTMENT. IT BROUGHT DIA AND INTELLIGENCE ANALYSTS INTO THE PICTURE. THIS IS WHERE WE WENT DOWN AND BORROWED AT FIRST AND ACTUALLY GOT OUR HANDS ON JIM HILLMAN AND THE OTHER PEOPLE FROM FSOC, WHO WERE...WHY DON'T YOU TALK A LITTLE BIT JIM ABOUT, HOW DID WE ACTUALLY WORK IT SO THAT THE DIA PICKED YOU GUYS UP FROM THE AIR FORCE, WAS THAT AN EASY THING OR IT SEEMS TO ME THAT THERE WAS SOME HURDLE THAT HAD TO GET OVER THERE?

HILLMAN: IT SEEMS TO BE WHAT HAPPENED IS THAT WHEN DEFSMAC CONCEPT WAS ACCEPTED, THE WENT OUT TO THE VARIOUS SERVICES, AIR FORCE, ARMY AND NAVY, FOR THE TRANSFER OF ANALYSTS TO DEFSMAC, BECAUSE THEY NEEDED SOME PEOPLE WITH INTELLIGENCE ANALYSIS AND REPORTING BACKGROUND. AND AS I SAID BEFORE, NEITHER NAVY NOR ARMY HAD ANYTHING LIKE THAT IN BEING RIGHT HERE, ARMY HAD A GROUP

IN HUNTSVILLE, BUT IT TURNED OUT THAT THE AIR FORCE HAD THIS TEAM THAT WAS ALREADY IN PLACE AND HAD REALLY BEEN WORKING WITH SMAC FOR SEVERAL YEARS IN FACT WE GOT CALLED IN ON MANY OF THE OPERATIONS WITH THE NSA ANALYSTS. I REMEMBER FIRST THERE WAS DIA PUT IN AN AIR FORCE COLONEL INTO THE CENTER TO GIVE THE DIA ELEMENT. AND HE STARTED WORKING WITH DOM COLELLA ((PHON)) AND I THINK DOM WAS REALLY PROBABLY AS RESPONSIBLE AS ANYONE FOR SAYING WE'VE GOT THE TEAM WHY NOT JUST TRANSFER THEM. SO WE BECAME DIA IN REALLY ONE DAY. ONE DAY WE WERE AFSOC AND THE NEXT DAY WE WERE DIA, IT WAS REALLY JUST AN ADMINISTRATIVE CHANGE-OVER.

C: I WANT TO GIVE SOME CREDIT TO MR. DONALD BORMAN, DONALD DID HELP CHARLIE GORDON AND NEIL CARSON WITH THE ORGANIZATIONAL ASPECTS OF DEFSMAC, AND HE WAS VERY HELPFUL AND HAD A LOT OF INSIGHT INTO THAT. THE CREATION OF A JOINT ORGANIZATION WAS...JOINING WITH ANOTHER INTELLIGENCE AGENCY, FORMALLY, I DOUBT COULD HAVE BEEN DONE, WOULD HAVE BEEN DONE, EXCEPT UNDER ORDERS BY THE DEFENSE DEPARTMENT. I DON'T THINK THAT NSA OR DIA WOULD HAVE GONE OUT AND MUTUALLY PROPOSED THIS AND SAY HEY LET'S DO THIS. THEY WERE ORDERED TO DO THAT BECAUSE THAT WAS THE COMMISSIONS RECOMMENDATION THAT IT BE DONE. WE HAD NEVER HAD A

JOINT ORGANIZATION, AS FAR AS I CAN REMEMBER WITH NSA AND ANY OTHER INTELLIGENCE ORGANIZATION, AND I'M NOT SURE THAT THERE'S BEEN ONE SINCE.
UNLESS PERHAPS THE WORK OF OUR FIELD ORGANIZATIONS, THE CRYPTOLOGIC SUPPORT
GROUPS, BUT I DON'T THINK THAT THOSE ARE JOINT ORGANIZATIONS, MAYBE I'M
WRONG. THERE WAS ALOT OF SUSPICION, VERY HEAVY SUSPICION, I NEVER DID WIN
THE BATTLE OF GETTING GREEN BADGES, THE SAME COLOR BADGES FOR THE DIA
MEMEBER, WE FINALLY ENDED UP GETTING A LITTLE PIN THAT SAID DEFSMAC OVER TOP OF IT. HERB CONLEY ((PHON)) WAS ABLE TO GIVE UP PERMISSION TO DO, THAT WAS
THE FIRST THING ON TOP OF A BADGE I THINK THAT WAS USED. I NEVER COULD GET
GREEN BADGES, ALWAYS MADE ME MADDER THAN HELL, THAT I COULDN'T. I DON'T
THINK THAT ANYBODY EVER LOOKED AT THE COLOR OF BADGES THAT I CAN REMEMBER IN
DEFSMAC ANYWAY. YOU WERE RUNNING AROUND TRYING TO GET YOUR WORK DONE. IT
WAS DIFFERENT. ALITTLE BIT HARD FOR ME, BECAUSE I DIDN'T KNOW EXACTLY HOW TO BEHAVE, I'D GO DOWN EVERYWEEK, A TREMENDOUSLY HELP BECAUSE THE DEPUTY
DIRECTOR OF THE DIA, COL. ED WINN, AIR FORCE, OKAY? WAS, WHILE ON PAPER I
REPORTED TO JOE CAROLL, DIRECTOR OF DIA, IN ACTUALITY, DEFSMAC CAME UNDER,
AND I BELIEVE THE PEOPLE WERE ASSIGNED TO DIAS&T, SCIENCE AND TECHNOLOGY,
COLONEL ED WINN WHO WAS TREMEMDOUSLY CAPABLE PERSON. NOW, MY FIRST DEPUTY,
WAS COLONEL NOW RETIRED TOTALLY, FORMERLY OF THE MARTIN MARIETTA CORPERATION, HE WAS VERY, HELPFUL AND I BELIEVE HE WORKED WITH YOU GUYS IN
FSOC TO HELP BRING YOU ON BOARD. WHEN DID WE GET ROY, ROY WAS FIRST A
DIACRYPEN, I'M TALKING ABOUT MR. ROY CRYPEN ((PHON)), WHO IS NOW THE NSA
REPRESENTATIVE OF THE SECRETARY OF DEFENSE FOR THE DIRECTOR, FORMER DIRECTOR
OF DEFSMAC, HE CAME INTO THIS BUSINESS AT NSA, THROUGH DEFSMAC, HE WAS A DIA
OFFICER AT FIRST.
HILLMAN: THAT'S RIGHT, AS DIA PUT IN SOME ADDITIONAL BILLETS, THEY WERE
MILITARY BILLETS, FOR INSTANCE THE CHIEF OF THE INTELLIGENCE
GROUP, COL. AND ROY CRYPEN WAS IN THAT FIRST GROUP, THERE WERE
ABOUT TWO OR THREE MILITARY THAT WERE BROUGHT IN.
T: AN ARMY COLONEL, DID OUR FIRST MOVIE, I THINK. I WISH I COULD FIND
THAT THING, TOP SECRET, IT WAS ONE OF THE FIRST TOP SECRET CODEWORD MOVIES,
DID YOU EVER SEE IT JIM? BOY'I WISH WE COULD GET A HOLD OF THAT MOVIE. WHAT
DID WE PAY, I THINK WE MADE THE WHOLE BLOOMIN' THING FOR \$10,000 OR SOMETHING LIKE THAT. WENT
TO ADALL ((PHON)) THERE'S A PICTURE OF A THE B-57 TAKING OFF, WITH
THE BLACK SMOKE COMING OUT, I DON'T KNOW WHETHER WE MADE IT THERE OR WHEN THE
PAKISTANI'S FLEW IT. WE USED TO FLY THE B-57 OVER PAKISTAN, WE TRIED TO GET
IT HIGH ENOUGH TO GET ABM TELEMETRY. WE NEVER COULD GET IT HIGH ENOUGH WHEN
THEY WEREN'T ON RAMADAN. THE FORMATION OF THE GROUP,CAME IN FIRST, HE STAYED THERE BRIEFLY, BUT WAS QUITE INSTRUMENTAL IN GETTING THE
ORGANIZATION GOING. I WOULD BE REMISS IF I DIDN'T CREDIT THE LATE MR.
CHARLES GORDON
F: YES
T: OF THIS AGENCY AS BEING ONE OF THE PRIME DRIVERS, BOTH OPERATIONALLY AND
PLANNING WISE OF THE SUCCESS OF BOTH SMAC AND DEFSMAC. I DON'T THINK ANYBODY
WOULD ARGUE WITH THE POINT THAT

CHAPLES GORDON DID CERTAINLY MORE TO HELP ME THAN I THINK SOME OF MY SUCCESSORS AND I THINK A FEW OTHER PEOPLE. HE WAS INSTRUMENTAL IN THE SMOOTH OPERATION OF THE SHIFT-WORK AND AQUIRING PEOPLE AND EQUIPMENT. I DON'T THINK IT SHOULD GO UNREMEARKED EITHER THAT UP UNTIL RECENTLY WHEN THE REDESIGN HAS BEGUN IN HERE, THAT MR. LUTHER GREENE, DID THE BASIC DESIGN WORK. I HELD HIS HAND IS SOME CASES, BUT MOSTLY I USEFUL TO GO UP AND KEEP DR. TORDELLA FROM CHOPPING THE COST DOWN. THE COST, AS THE BEST MY MEMORY SERVES ME WAS \$370,029, WE DIDN'T HAVE TO PAY FOR THE GEOFEED ((PHON)) TELETYPE MACHINE. WE HAD TO PAY FOR THE AIR CONDITIONING, THE RAISED FLOORS, THE T.V. SETS. MR. GREENE AND I TOURED, WE WENT TO THE OLD BLUE CUBE, TO SEE HOW THE AIR FORCE WAS DOING IT OUT THERE AND THEN LUTHER THEN WENT INDEPENDANTLY DOWN TO HOUSTON TO LOOK AT THE BEGINNING OF THE CENTER DOWN THERE AND WE DESIGNED THE WHOLE THING IN THE FOUSE, OKAY?

F: CHARLIE, ANY REASON WHY YOU SELECTED A MILITARY MAN INSTEAD OF A CIVILIAN HEAD, THAT IS MAX MITCHELL, RATHER THAN...

T: WELL, THEN OF COURSE MAC MITCHELL WHO CAME ON AFTER WHO WAS INSTRUMENTAL, AND I'M A FLY BY NIGHT GUY. I GET THINGS STARTED, BUT I DON'T ALWAYS FINISH THEM. I GUESS MAX WAS THE GUY WHO MADE THE THING STABLE. I PLAYED AROUND TOO MUCH DOING ANALYSIS TO BE A GOOD MANAGER, I'VE NEVER BEEN FAMOUS FOR THAT ANYWAY. MAX BROUGHT THE COLD MANAGEMENT AND ALLOWED, IT TO BECOME A PERMANENT PRODUCTIVE UNIT, I THINK. THE REASON, I NEVER COULD UNDERSTAND NSA THAT... THE DIRECTIVE, IF MY MEMORY SERVES ME CORRECT, DOES NOT INDICATE THAT THERE SHOULD BE AN NSA GUY IN CHARGE, I'VE ALWAYS BEEN EMBARRASSED BY THE FACT THAT NSA, THE DIRECTOR OF NSA AND I HOPE THAT THE PRESENT DIRECTOR HEARS ME SAY THIS SOMETIME, I DON'T CARE IF YOU PLAY THE TAPE FOR HIM, GENERAL ODEM OR SOME FURTHER DIRECTOR OUGHT TO THINK ABOUT THIS, DIA HAD GROWN UP NOW AND THEY WERE PRETTY NEW WHEN WE STARTED OUT COMPARED TO NSA, WE USED TO LAUGH AS DIA, THAT'S WRONG, THEY WEREN'T AS GOOD AS THEY SHOULD HAVE BEEN IN THE BEGINNING, ALTHOUGH THEIR SET SHOP WAS QUITE GOOD, THEY'VE GROWN UP, THEY'VE BECOME NATURE, I THINK THE DIRECTIVE MEANT THAT AT SOME POINT IF WE GET A GOOD CIVILIAN OR CAREER OFFICER, THAT DIA SHOULD HAVE THE BOSS OF IT. AND I WAS KIND OF EMBARASSED THAT THEY DIDN'T OVER THE YEARS DO THAT, WE HAD TO CONVEFT MAX MITCHELL TO A CIVILIAN AND THEN MAKE HIM CHIEF LATER ON. THINK THAT IF MR. HILLMAN HERE WAS WILLING TO HANG AROUND, ONCE LEAVES, HE'D PROBABLY BE MY FIRST NOMINEE, IF WAS WILLING TO STAY IN CIVIL SERVICE THAT LONG, BUT I DON'T THINK THAT HE LEAVES, HE'D PROBABLY BE MY FIRST NOMINEE, IF HE WOULD BE. THERE ARE OBVIOUSLY ARE QUALIFIED PEOPLE NOW ADAYS IN THE BUSINESS, AND I THINK THAT THE AGENCY SHOULD CONSIDER THAT. THEY WERE VERY JEALOUS OF THE IDEA ORIGINALLY THAT WE EVEN HAD THE PEOPLE IN THE BUILDING. AND SOME PARTS OF WSA DIDN'T WANT TO SHARE DATA JUST BECAUSEWE HAD DIA PEOPLE DOWN HERE, IT'S THE CRAZIEST THING YOU EVER SAW. CHARLIE WHEN DEFSMAC WAS ESTABLISHED AND WE TALKED ABOUT THE MISSION, DID IT BROADEN TO INCLUDE OTHER THAN THE SOVIET MISSILE PROGRAM?

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HAS, EMABLE, HELPED TO ENABLE OUR COUNTRY TO UNDERSTAND CERTAIN SOVIET RECONNAISSAINCE ACTIVITY THAT HELPS US UNDERSTAND AND INFLUENCES OUR OWN RECONNAISSAINCE, AND THAT'S A FACTOR FOR STABILITY, THE LACK OF SUPRISE.

PROGRAM. THAT WILL PUT US BACK IN THE BIG SURPRISE ARENA WHICH IS MUCH LESS STABLE IN A POLITICAL SENSE. JIM, WHAT ABOUT HELPING TO ANSWER THE QUESTION OF HOW WE'VE HELPED THE US SPACE EFFORT.

HILLMAN: I THINK TWO THINGS COME TO MIND. THERE'S PROBABLY SEVERAL EXAMPLES BUT BACK IN THE LATE '60'S WE FELT THE SOVIETS WERE PREPARING FOR A MANNED LUNAR MISSION, INITIALLY A CIRCUMLUNAR FLIGHT. WE WERE KIND OF OUT BY OURSEFVES WITH THAT IDEA FOR A LONG TIME. IN FACT CIA REALLY, THEY WERE NOT REPORTING ON THAT, THEY JUST DIDN'T FEEL THAT THE SOVIETS WERE ANY WHERE NEAR THAT. BUT ALL THE EVIDENCE THAT WE HAD REALLY TRACKED IN THAT DIRECTION, AND I'VE BEEN TOLD THAT THE CONVINCING ARGUNENTS THAT WE REPORTED, INFLUENCED NASA TO FLY APOLLO 8, IN OTHER WORDS, TO PREFORM THAT LUNAR ORBIT MISSION. THAT INITIALLY WAS NOT IN THE PROGRAM, THEY WERE JUST GOING TO GO UP AND LAND. BUT THEY DID THAT EARLY, BEFORE THE LANDING WAS READY, SO WE MAY HAVE HAD SOME INFLUENCE ON THAT BY ALLOWING THE UNITED STATES...TURNED OUT THE SOVIETS HAD PROBLEMS WITH THEIR BOOSTERS AND THEY NEVER DID MAKE THE MISSION, BUT THEY FLEW A NUMBER OF UNMANNED PRECURSER FLIGHTS. ANOTHER EXAMPLE MIGHT BE IN I GUESS THE AREA OF SDI, GENERAL ABRAMSON ((PHON)) EVEN WHEN HE WAS STILL WITH THE APOLLO PROGRAM, VISITED US A NUMBER OF TIMES. HE WAS VERY INTERESTED IN OUR WORK WITH THE SOVIET MANNED SPACE PROGRAM PARTICULARLY HOW IT APPLIED TO THE MILITARY OPPERATION. AND HE MADE THE STATEMENT AS HE WAS GETTING INVOLVED WITH SDI'S SAID, YOU KNOW THE SOVIETS WITH THEIR MANNED SPACE STATION PROGRAM HAVE BEEN DOING THE BASIC RESEARCH FOR MANY MANY YEARS WHICH WE'RE GONNA HAVE TO START DOING NOW FOR THIS SDI INITIATIVE. SO I DON'T KNOW TO WHAT DEGREE, WE SEEMED TO IF ANYTHING HIGHLIGHTED THE URGENCY OF GETTING ON WITH OUR BASIC RESEARCH IN THAT AREA, GENERAL ABRAHAMSON SEEMED TO BE VERY INTERESTED AND WE CONTINUE TO WORK CLOSELY WITH A LOT OF THE NASA PEOPLE; COLONEL ROSS AN ASTRONAUT, REGULARLY VISITS US, HE WAS HERE JUST RECENTLY.

C: COULD I ASK ONE OTHER THING BACK ON THE EARLY ORGANIZATION WITH THE Lagration HERE AS OPPOSED TO SOMEWHERE ELSE LIKE COLORADO SPRINGS OR . . .

T: ((INTERUPTING)) WHEN THE IDEA FIRST PROPOSED TO HAVE A DEFSMAC AND AT A COUPLE OF POINTS FOLLOWING THAT IT WAS SERIOUSLY CONSIDERED BY ME AND SEVERAL OTHER PEOPLE THE POSSIBILITY OF LOCATING DEFSMAC AT COLORADO SPRINGS. THERE ARE SOME OBVIOUS REASONS FOR THAT ONE THE RECOGNITION THAT THE SMAC PART OF DEFSMAC DID KNOW IN ADVANCE ABOUT SOVIET MISSILE TESTING, OKAY? AND THERE WAS ALWAYS THE POSSIBILITY AND IT UNFORTUNATELY REMAINS

WELL, OF COURSE THE CHINESE PROGRAM CAME ALONG FAIRLY QUICKLY AND SLOWLY BUT SURELY THAT WAS BROUGHT IN. BECAUSE THE DIRECTIVE DIDN'T SPECIFY AS FAR AS I REMEMBER, IT SAID FOREIGN NOT SPECIFICALLY THIS, SO I THINK THEY'VE BEEN VERY HELPFUL IN THE CASE OF THE CHINESE, WE DID SOME WORK FOR A WHILE ON THE I DON'T KNOW IF WE DO ANYMORE, JIM, DO WE? HILLMAN: WELL, AS IT TURNS OUT, YES WE DO, ALTHOUGH I HAVE TO LOOK AT OUR REPORTING, OUR INTELLIGENCE REPORTING IS STILL PRETTY MUCH LIMITED TO THE SOVIETS AND THE PRC, BUT IF I COULD EXPAND A LITTLE BIT MORE. IT TURNS OUT THAT IN THE CASE OF ALOT OF SO, AS IT TURNS OUT THAT TAND WE ARE WORKING MORE CLOSELY AND THAT T TURNED OUT TO BE A VERY MAJOR EFFORT IN OUR PART AS WE'VE GOTTEN INVOLVED. THAT PROMISES TO EXPAND STILE WITHIN THE NEXT FEW YEARS. PL 86-36/50 USC 3605 F: JIM AND CHARLIE WHAT ABOUT THE SUPPORT TO THE US SPACE PROGRAM, WHAT PERCENTAGE OF THE OPERATIONS WITHIN DEFSMAC ARE RELATED TO THE US PROGRAM? WELL, I'M NOT CERTAIN THAT I UNDERSTAND ALL ASPECTS OF YOUR OUESTION THERE. CERTAINLY DEFSMAC HAS OVER THE YEARS PROVIDED ASSISTANCE TO TIP-OFF OF THE US SPACE BASE AND ORIGINALLY WITH THE U-2. THE SPACE BASE THING FOLLOWED THE U-2, POST 1960 THOUGH THE SPACE ASPECT OF THE US EFFORT DEFSMAC FURNISHED INVALUABLE AID TO THE TIP-OFF POR THE PHOTOGRAPHING OF FOREIGN MISSILE AND SPACE PREPARATIONS, AND THINGS ON THE PAD AND SO ON. IN A LARGER SENSE, WE HAVE PROVIDED NASA WITH...WHEN I SAY WE, THE INTELLIGENCE COMMUNITY, DEFSMAC BEING AN AGENT IN THE INTELLIGENCE COMMUNITY...WITH INVALUABLE DATA THAT RELATES TO SOVIET EFFORTS. FOR EXAMPLE IN THE SPACE EFFORT, AND THAT HAS HAD SOME INFLUENCE ON US EFFORTS PARTICULARLY IN CONNECTION WITH SOME OF THE LUNAR WORK AND THE DEEP SPACE EFFORT. I THINK JPL, WHICH IS A BIG SUPPORTER OF DEFSMAC AND NSA, IN ITS INTEREST IN US SPACE EFFORTS, HAS TRIED TO FOLLOW THE SOVIET EFFORTS VERY CLOSELY TO GAIN VARIOUS KINDS OF INFORMATION TO SUPPORT THE US EFFORT. JIM BURKE, OF JPL HAS BEEN A CLOSE SUPPORTER OVER THE YEARS OF THE WHOLE EFFORT. I'D LIKE TO BELIEVE THAT SOME OF THE REPORTAGE AND INTELLIGENCE THAT DEFSMAC HAS HELPED TO PRODUCE IN CERTAIN COLLECTION AND IN SOME WAYS REPORTING. I SHOULD REALLY BE LETTING JIM HILLMAN ANSWER THIS QUESTION RATHER THAN ME, THAT BY TAKING SOME OF THE MYSTIC, SURPRISE OUT OF THE SOVIET SPACE EFFORT, AND THE CHINESE EFFORT, FOR EXAMPLE, THIS MAKES AN INTELLIGENCE COMMUNITY CONTRIBUTION TO STABILITY IN THE NUCLEAR AGE. I THINK ARTHUR CLARK HAS BEEN A STRONG PROPONENT BOTH AT THE UN AND ELSEWHERE AS A WORLD SPOKESMAN IN THAT THE MUTUALLY ACCEPTABLE SPACE RECONNASSAINCE SYSTEMS OF THE US AND SOVIET UNION HAD BEEN A VERY STABILIZING INFLUENCE IN WORLD PEACE, BECAUSE THE HELPED TO PROVIDE THE NO SURPRISE OR LESS SURPRISE INFLUENCE IN WORLD AFFAIRS BETWEEN; THE TWO COUNTRIES. DEFSMAC OGA EO 3.3b(3)

TODAYA THAT A MISSILE TEST COULD GO WRONG AND IN SOME PERIOD ESPECIALLY IN THE EARLY DAYS, OR PERHAPS IN SOME FUTURE TIME, WHEN A LARGE CRISIS IS OCCURING THAT ONE MIGHT COME OVER THE POLE BY MISTAKE, NOT NECESSARILY LOADED WITH A NUC. THIS COULD, FELT BY SOME QUARTERS, UNDER THE RIGHT CIRCUMSTANCES CAUSE CONSIDERABLE ALARM. IT IS ALWAYS VALUABLE, I THINK, IT HAS ALWAYS BEEN FELT, JIM, I WOULD LIKE YOU TO COMMENT ON THIS, THAT WHEN POSSIBLE TO PRENOTIFY NORAD OF THE IMPENDING MISSILE TEST. THIS IS PARTICULARLY TRUE, SOMETIMES IN THE PAST WHEN THEY HAVE HAD FIRINGS FRON OPERATIONAL SITES IN THE SOVIET UNION, AND ON OCCASSION, IF THERE ARE A NUMBER OF THESE OCCURING IN A HURRY -RIPPLE FIRINGS. THE UNITED STATES DOESN'T HAVE THE PRACTICE, EXTENSIVE PRACTICE OF FIRING OUT OF OPERATIONAL SILOS THE SOVIETS HAVE HAD IN THE PAST. THE IDEA OF PUTTING A GOING ORGANIZATION, LIKE SMAC, IN A NEW FORM OF DEFSMAC IN COLORADO SPRINGS, TO BE CLOSELY RELATED TO THE WHOLE WARNING PROBLEM, OKAY? YOU HAVE TO REMEMBER THAT WE DIDN'T HAVE DSP WHEN IT WAS NOT IN ORBIT EVEN. WHEN WE FORMED DEFSMAC. IN FACT WE WERE OF SOME HELP IN THE RESEARCH AND DEVELOPMENT OF THE DSP FORRUNNER SYSTEMS IN PROVIDING DATA ON MISSILE TEST FIRINGS TO THEM. ONCE THEY GOT THE LOW ORBITOR DSP AT FIRST TO TEST THE TECHNOLOGY OF THE SYSTEM. SO THERE WERE A NUMBER OF ARGUMENTS THAT THE IDEA BEING THAT WE WERE RELATED TO REAL TIME INTELLIGENCE, RELATED MISSILE FIRINGS, AND SO ON. ALSO, IN THE EARLY DAYS WE DIDN'T KNOW AND STILL DON'T FOR SURE, WHAT THE EVENTUAL MILITARY USE OF SPACE IS GOING TO BE, OKAY? NOW, THE REASON THAT I DIDN'T SUPPORT THE IDEA OF PUTTING DEFSMAC OUT THERE WAS THE FACT THAT WE BY NO MEANS IN THAT ERA COULD HAVE SUPPORTED IT WITH THE NECESSARY COMMUNICATIONS. I BELIEVE THAT THAT WAS A STRONG ARGUMENT AGAINST IT. NOW A DAYS WE COULD SUPPORT A TRANSFER OF DATA FROM NSA TO NORAD IN THAT VOLUME. ANOTHER THING, WHICH EVEN IF WE COULD HAVE SCRAPED THE COMMUNICATIONS TOGETHER, IS THAT DEFSMAC OVER THE YEARS HAS TAKEN GREAT ADVANTAGE OF BEING SUPPORTED BY THE REST OF NSA AND THE DIA DOWN TOWN AND THE CIA AND THAT BY BEING LOCATED IN A GROUP WITH VERY LARGE COMMUNICATIONS AND IN CLOSE PROXIMITY TO THE ANALYSTS WHO ARE DOING DEPTH WORK, BOTH DOWN TOWN AT DIA AND CIA AND HERE, IT'S ENABLED US TO OPERATE WITH A MUCH SMALLER STAFF THAN PROBABLY WOULD HAVE BEEN THE CASE HAD WE MADE THE DECISION TO GO TO NORAD WHERE WE WOULD HAVE HAD TO HAVE A MUCH LARGER AND MORE EXPENSIVE STAFF AND SYSTEM TO DO IT. BUT, THERE WAS NO REASON WHY WE COULDN'T EXCEPT FOR THOSE TWO MAJOR POINTS THAT I REMEMBER, IT SURELY WOULD HAVE PLEASED THE PEOPLE IN COLORADO SPRINGS BECAUSE THEY ALWAYS, THEY FELT A LITTLE BIT JEALOUS ABOUT THE FACT THAT WE HAD ACCESS, ONE WE HAD GOOD ANALYSTS, AND WE HAD A LOT OF CONTINUITY WHICH THEY DIDN'T ALWAYS HAVE. THEY HAD GOOD ANALYSTS, BUT THEY TURNED OVER AND OVER AND WE HAD ACCESS TO ALOT OF DATA BEFORE THEY EVER DID. LIKE I SAID THERE WAS ALWAYS A LITTLE JEALOUSY IN THAT RESPECT.

F: WHAT DO YOU THINK, DO YOU WANT TO PROLONG THIS, I HAVE 15...

T: I COULD GO ON TALKING, BUT YOU KNOW OF MANY MORE PEOPLE WHO HAVE LIVED WITH DEFSMAC MORE CURRENTLY THAN I HAVE, AND SO, IF YOU WANT TO DEAL WITH SOME PARTICULAR POINT LATER ON, I WILL.

TOP-SECRET//SI/TK//RSEN/NOFORN A GOLD MINE SO FAR . . . OGA PL 86-36/50 USC 3605 F: CHARLIE I HAVE 15 OR 16... T: I THINK YOU OUGHT TO GET HERE ON THE CARPET ON SOME OF THE PARTICULAR ANALYTICAL FEATS OF THE . . . I TRIED; TO STAY AWAY FROM THOSE, THERE HAVE BEEN SOME ANALYTICAL FEATS THAT REALLY, I THINK IN THE EARLY DAYS, I DIDN'T REMARK ON THIS POINT, ONCE WE GOT GOING WE ALSO SHOULD MENTION THAT WE HAD A RESIDENT CLA OFFICER HERE IN THE BEGINNING. FULL TIME. WE EVEN CALLED HIM IN VERY HELPFUL. MR. DUCKET, CARL DUCKET, WHO WAS HEAD OF FUMSAC, LATER REPLACED DR. BUD WHEELON ((PHON)) WHO WAS A MISSILE SPECIALIST, NOW CHAIRMAN OF THE BOARD OF HUGHS AIRCRAFT, THE WHOLE THING. MR DUCKET WAS, WE COULD: HAVE RUN OFF DAVE BRANNON THE ONE WHO FOLLOWED CARL AS DIRECTOR OF FUMSAC, WE COULD HAVE RUN OFF IN THE AIR COMPETITION WITH THE CIA AND THE FIGHT AND SO ON LIKE THAT. IT TURNED OUT THAT I DON'T THINK WE DID. THEY HAD A REPORTING SCHEME ON, THEY DO A GOOD JOB. THEY TRIED NOT TO DO....IT WAS A LITTLE BIT COMPETITIVE FROM TIME TO TIME, IT DIDN'T HURT ANYTHING. EVENTUALLY, I THINK THE GOOD RELATIONSHIP BETWEEN FUMSAC, I DON'T KNOW WHETHER THEY STILL EXIST AS A MISSILE CENTER...I DON'T THINK THEY DO. THE GOOD RELATIONSHIP WHICH WAS DEVELOPED THERE, I. THINK SERVED, CERTAINLY HELPED ME IN MY NEXT JOB, BECAUSE I WAS MOVED OUT OF DEFSMAC TO BE THE DIRECTOR, JOHN CARTER'S ADVISOR, ON . ELINT AND THE BYEMAN PROGRAMS THAT NSA WAS INVOLVED IN, AND BECAME THE PROGRAM OFFICER WITH THE HELP OF ROGER THARE ((PHON)), FOR WHAT WAS THEN MR. STEVE SMITH, THEN WENT BACK AS DIRECTOR OF OPERATIONS AND IS NOW BACK AS A KEY PERSON IN THE ORGANIZATION. STEVE WAS ONE OF THE ONES THAT NOT ONLY WENT OUT AS ONE OF THE EARLY MEMBERS, BUT IT WAS ALSO INSTRUMENTAL, TREMENDOUSLY INSTRUMENTAL ALONG WITH COLONEL BOB GALLOWAY, OF THE AIR FORCE, IN THE TRAINING OF THE FIRST TEAM WHO WENT OUT TO THAT'S ENOUGH FOR ME. MY GOSH, YOU CAN T GET MUCH. HELEN IF I USED BAD WORDS, YOU SCRATCH THEM OUT OF THAT. E● 3.3b(3) PL 86-36/50 USC 3605

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F: CHARLIE I HAVE ABOUT 70 QUESTIONS HERE THAT I'LL HAVE TO GET BACK TO YOU AND GET THE SPECIFICS ONLY ON LATER ON. IF YOU WANT TO FILL IN THAT GAP FROM ABOUT 1946 UNTIL ABOUT 1955, SOME OF THE JOBS THAT YOU HAD

T: NO, I'M AFRAID THAT YOU'LL GET BORED WITH THAT.

F: I LOVE THESE STORIES CHARLES, THEY ARE WONDERFUL

T: I GUESS THE FACT OF THE MATTER IS THAT THE BUSINESS HAS GOT AS MUCH EXCITEMENT IN THE FUTURE AS IT EVER HAD IN THE PAST. UNFORTUNATELY, MAYBE MORE DANGER, ALTHOUGH WE WILL HOPE NOT. I THINK THE WORLD OF SDI EITHER OUR VERSION OR THE SOVIETS PUTS A NEW DIMENTION INTO THE WORK OF DEFSMAC IF WE DO GO INTO A SPACE BORNE TEST PROGRAM BEYOND DELTA 180 OR WHATEVER IT WAS. IN THE NEXT FEW YEARS, I'M SURE THE SOVIETS WILL NOT SIT STILL, I THINK, YOU KNOW THAT I DIDN'T WANT TO MENTION THIS ON THE TAPE, BUT I WAS IN STILL TURNED ON?

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