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SCHEIDT

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CHRONOLOGY

1951- RAND study envisions TV-like pictures from space. Recognizes that technology is not currently available.

1957-Ike authorizes building of an imaging satellite

1957-Work begins on SAMOS, as part of WS-117L, a very ambitious Air Force constellation of recon satellites.

1962(?) Development Projects Division, DDP, CIA founded. Renamed Office of Special Activities (OSA) in 1962, pI-1, DS&T History.

April 1963- USIB study on reducing satellite vulnerability recommends NRT tasking and readout. CIA/OSA begins study on covert satellite. 5114.

Nov 1963-OSA, DST/SAS, and OSI conclude that time between collection and analysis critical to I & W intelligence. 5114

June 1964- CIA/OSA reports to DNRO on desirability of NRT satellite. 5114

July 1964- ZOSTER(CIA/OSA), study begun, to investigate various NRT-associated technologies. Four contracts let:

1. reuseable photo-sensitive material
2. vidicon tube
3. video-transmitted photo simulation
4. guidance system 5114

Mar 1965- ZOSTER had produced few conclusions. Reduced to a development planning exercise and assigned to Les Dirks' Design and Analysis Div. 5114

Oct 1965- OSP (Office of Special Projects) founded, including D&AD. 5114
OSA transitioned into aircraft operations only.

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[redacted]

Dec 1965- OSP study begun; pursued NRT possibilities. 5114

Late 1965- [redacted]

[redacted] given contacts to develop photo-sensitive elements: a solid-state device. 5114.

1965 & 66; Parallel efforts underway:
 CIA-NRT using new technology
 AF- NRT using GAMBIT 5114

15 Sep66- SAFSP briefed COMOR on FROG. 5114

22-23 Sep 66- OSP briefed COMOR on ZAMAN. 5114

23 Nov 66- EXCOM curtailed level of effort on FROG. 5114

Nov 66- Aug 67- Tidwell study on FROG vs NRT, directed by DCI Helms. 5114

June 1967-D&AD/OSP included an Advanced Systems Branch, made up of Les Dirks and Norbert Crookston. OSP phone book.

June 67-Thomas Appleberry joined OSP. Appleberry interview.

Aug 67- ZAMAN created in OSP to develop various technologies to the point where a specific system design could be initiated. Two years funding at [redacted] 5114. Frank Eliot and Thomas Appleberry joined ADV SYS BR. OSP phone book.

14 Feb 68-DCI Helms sent Tidwell Study to NRO for comment. 5114

15 May 68- Dirks "Blue Book" published. 91T-037

May 68- Land proposes a full-speed effort on EOI, with at least [redacted] in funding. 5114 (May be 1969)

Nov 1968- [redacted] given to ZAMAN by NRP EXCOM for NRT development. 5114

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18 Dec 68- Land Panel briefed by Frank Eliot, OSP, on solid-state technology. Panel endorses it as the most promising of the technologies under study. 5114

Jan 1969- Technology development on relay satellite began 5112.

1969- CIA study on the impact of a NRT system on intelligence production -- 91T-055.

Mar 1969- NRO responded negatively to Tidwell study. 5114

Jun 1969- DNRO McLucas sends USIB message favorable to Agency NRT work. 5114

Jan-Jun 1969- Inlow study on effects on user community and NPIC of a NRT system. 5114

15 Jun 69-DORIAN (MOL) cancelled. 5114.

Jul 1969- USIB approved requirement for an NRT system. 5114

1 Aug 69- Photo Systems Div formed in OSP, to merge CORONA and HEXAGON people. p114, CORONA history.

Aug/Sep 1969-Project financing revamped: [] M authorized to pursue solid-state effort with no system-level design work authorized. 5114.

Nov 1969-Jan 70- Fubini Panel eventually threw cold water on NRT. 5114

1970- Program B had a modest effort underway to develop an []
BYE 119558-78.

14 Feb 70- Fubini Panel report-serious technical problems and uncertainties about solid-state devices. 5114.

27 Feb 70-Dirks rebutts Fubini Panel with support from Dick Garwin, a Fubini Panel member. 5114. (some question about his being a Fubini panel member)

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[REDACTED]

18 Mar 70- Joint meeting of Fubini and Land Panels, with Garwin chairing: results more favorable to EOI.5114

April 1970- [REDACTED] Program Office formed in SD. 5112

Late July 70-ZAMAN becomes a separate program in OSP, with Charles Roth as Project Director. 5114. Known internally as EOI Program.

Sep 70-System definition RFP issued. 5114.

Oct 70 [REDACTED] completed testing of I/S to R/S [REDACTED] antenna. 5114

Nov 70- Contract Review Committee begins looking at system concepts. 5114.

9 Dec 70- EXCOM still not satisfied, put off considering system development until Jan 71. 5114.

Jan 1971- OSP asked for new bids; program divided into 5 segments: relay, IS, C & C, PF and SI. 5114

15 Jan 1971-Memo from Wm. Rogers, SECSTATE, to DCI Helms on the benefits of FROG over EOI. 92T-122.

Spring 71-USIB examines alternatives to ZAMAN, because of concern over the time it would take to IOC (late 75). 5114.

Spring 71- [REDACTED] created after DIA simulation cast doubt on area coverage capability in frame mode during crisis. Brownman tape.

3 April 1971-EXCOM decides to put [REDACTED] 92T-121.

22 April 1971-Memo from Geo Shultz, OMB, to David Packard, which requests NRT be flown in Nixon's last term. 92T-123.

23 Apr 71- EXCOM considers FROG. 5114.

2Summer 71- David memo to President- to be signed by Packard as C/EXCOM. Gave options to President and let him decide. 91T-039

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Summer 1971- NRP EXCOM changed directions, decided to develop both FROG and ZAMAN with primary funding to FROG. 5114

June 1971- Duckett lobbies to have FROG decision overturned. pIV-5, DS&T History.

June 1971- Duckett meets with Senator Ellender and his AA, Wm. Woodruff. pIV-5, DS&T History.

13 July 1971-Memo from D/OSP to DNRO, on Alternative EOI Configurations which could ultimately replace GAMBIT and HEXAGON. 92T-121.

9 August 1971-Memo from DCI Helms to President Nixon, urging that EOI be built over FROG and QRS. 92T-124.

17 Aug 1971-Memo from SECDEF Laird to President on EXCOM decision to fund EOI at the level of per year, noting disagreements between Packard, Helms, and David. 92T-120.

1971--Land Panel Report, EOI vs FROG, 91T-039. and 92T-125 (real thing).

Mid-71- John Hicks replaced Art Lundahl as D/NPIC. pI-5, DS&T History.

1971-Kerr Special Study Group 91T-039.

Late August 1971- Sid Drell and Dick Garwin gave a secret briefing to Henry Kissinger on desirability of building ZAMAN. pIV-6, DS&T History.

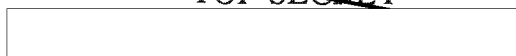
Sep 1971- Kissinger letter giving go-ahead to ZAMAN and cancelling FROG. 5114

30 September 1971 EXCOM- stated that Kissinger intended to limit spending on EOI to per year, with first launch in 1976. 92T-134.

Oct 1971-EOI Program/OSP renamed Z Program. OSP phone book.

Nov 1971- authorized by DNRO and assigned to AF for development. Work began in July 72. 5114.

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[redacted]

Late 1971- [redacted] chosen as prime. [redacted] optics. [redacted] to do guidance and [redacted] the TWTA [redacted] got C & C and SI.. PF to [redacted] did the LIR. [redacted] did the antennas and [redacted] built the recorders.
5114

Jan 1972- Now renamed KENNEN.5114

April 1972- NRO approved procurement of [redacted] the relay satellite for KENNEN. 5112.

June 1972- HAC gets contract for RS 1,2,3. 5112

Sep 1972- HEXAGON transferred to AF, primarily so that ZAMAN could be retained entirely within CIA. 5114

Late 1972- area search requirement given to ZAMAN., at instigation of Dr. Edward E. David, Jr., Presidential Science Advisor 5114 (check for date)

Spring 1973- [redacted]

[redacted] Bye-119558-78.

20 April 1973- OSP becomes OD&E (Office of Development and Engineering) pV-5, DS&T History.

1974- OSA disbanded and assets transferred to Air Force. pI-1, DS&T History.

1974- imaging systems mix study, led up to Summer 1974 EXCOM decision for the 1976-80 time frame. 91T-050.

Sep 75- R. P. Hazzard became Program Director, vice Charles Roth. pVIII-4, DS&T History.

Late 1975- [redacted] terminated by DNRO. Bye 119558-78. Continued in Program B at a very low level in 1976 & 77.

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[Redacted]

Feb 1976- RS-1 completed system test-5112

June 1976- [Redacted] 5112

Aug 1976- [Redacted] 5112

Sep 1976- [Redacted] 5112.

19 Dec 1976- [Redacted] launched from VAFB.5114

21 Dec 76- first I/S to R/S acquisition.

29 Dec 76- [Redacted] 91T-054.

1977- [Redacted]

[Redacted] Bye 119558-78.

Jan 1977- [Redacted] declared operational, 20 Jan 77. pIV-11, DS&T History.

1977- Imagery Requirements Document, 91T-051

[Redacted] 91T-054.

Feb 77- [Redacted]

[Redacted]

7 May 77- [Redacted] 91T-054

Aug 77- [Redacted] pII-20, DS&T History.

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[Redacted]