

from Tom Montgomery

<u>System</u>	<u>Date</u>	<u>Description</u>
UNIVAC File Computer used to process flight information	1956	(1956 award?; 1959 install?) In 1956, the FAA taps Sperry Univac to find out how to use computers for air traffic control. The UNIVAC File Computer used to process flight information at five ATC centers by 1959.
ARTS I - Atlanta	1963-1966	ARTS I - Atlanta. Two UNIVAC 1218 computers bring automated air traffic control to Atlanta, Georgia. The date, 1964. The computer backed up system called ARTS, uses advanced electronics to tag radar blips with symbols, letters and numbers - alphanumerics. (Per Swiss ATC proposal and a 1963 Journal of ATC article, ARTS meant Advanced Radar Traffic Control System.) INCO at Atlanta tower to start in March 1964 with full operation scheduled for July 1964. Radars were ASR-4 and ATCRBI-3. 1218 computers. A lot of evaluation time. The system was declared operational after field trials in 1966. In 1963 the FAA awarded a contract to the Univac Division of Sperry Rand .. for ARTS I in Atlanta.
Stored Program Alpha-Numeric (SPAN) beacon system	1964	Stored Program Alpha-Numeric (SPAN) beacon system - 1964. Per 1963 Journal of ATC article, ARTS is primarily a terminal system. A similar system for beacon readout only will be installed in the high Altitude Positive Control Facility at Indianapolis Center. This system is called SPAN. Per Sept 1964 journal of ATC article, "early next Spring controllers will get a preview of the future method for displaying aircraft identification and altitude on their displays."
ARTS IA - New York Common IFR Room (CIFRR)	1966 -1968	ARTS IA - New York Common IFR Room (CIFRR). Put into operation early in 1967. Dedication ceremony July 11, 1968. Operational commissioning in June 1969. In 1966, Univac was awarded the contract for the ARTS IA for the CIFRR. Installation began in late 1966 and completed early in 1968.
ARTS III	February 20, 1969	Basic ARTS III Contract award
	1970/1971	ARTS Enhancement Phase I (Radar tracking, bcn trkg impr, Failsafe/failsoft, all-digital display (DEDS vector mod.) , Multi-sensor trkg, M&S, Multi-processing, Continuous Data Recording, Flight Data Distribution) During 1970 and 1971 the FAA awarded contracts to develop six of these expansion functions...
	2/71 - 6/73	Basic ARTS III site deployment (64 systems)
	9/29/71 - 8/13/75	Basic ARTS III sites go operational (DFW was latest; DFW airport was just opening up. Love field used to be Dallas's main airport.)
	1974	Atlanta ARTS III contract award; Atlanta ARTS III deployed (2/76 IOC; 9/76 operational)
	1975	ARTS Enhancement Phase II Award (task 7, Task 34 - Tampa; other tasks)
	Fall 1984	ARTS Enhancement Phase III - Architecture studies for an Expanded New York TRACON system
Japanese ARTS III	1974	Japanese ARTS III (July 1977: recently completed installs at Tokyo Haneda and Osaka) (Sold off in Feb. 1975. Operational ?)
	1974	Japanese ARTS III systems installed in Tokyo and Osaka
	1980	Japanese ARTS III system installed in Narita
	1981	Japanese ARTS III system installed in Fukuoka
	1984	Japanese ARTS III system installed in Nagoya
	1985	Japanese ARTS III system installed in Sendai Training Center
EARTS-1 (Murphy Dome)	1/74-12/74	EARTS-1 (Murphy Dome)
MSAW	Dec 1974	ARTS III MSAW contract (\$2.9M)

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	July-Nov 1976	MSAW software operational at sites (a0.12.1; 11/76)
Tampa - Sarasota ARTS IIIA		ARTS Enhancement Phase II Award (task 7, Task 34 - Tampa; other tasks)
	Sep-76	Start work in Tampa Tracon
	May 1979	Tampa operational date; First cut over to operational status (IOC); Tampa went operational on Memorial Day weekend in 1979, first up on Saturday; had some problems; they were fixed and the system went back up operationally on Monday.
	September 7, 1982	Tampa-Sarasota system commissioned
Conflict Alert	July 1975	ARTS III Conflict Alert contract
	Feb 1976	John Flood records show Conflict Alert development started on ARTS III Enhancement Phase II task number 4 (there were several CA projects prior to this!)
	December 7, 1977	ARTS III Conflict Alert operational at IAH (A0.15?) (CA dev. as part of Phase II task)
	July 15, 1978	ARTS III Conflict Alert operational at MIA (A0.16?) (CA dev. as part of Phase II task)
	12/77 - 9/78	Conflict Alert software operational at ARTS III sites
ARTS IIIA, EARTS and NY TRACON	Aug 1976	Award of ARTS IIIA, CDR, EARTS and NY TRACON ARTS IIIA contract (\$36.675M)
	Oct - Dec 1979	New York TRACON ARTS IIIA SOST
	10/79 - 1981??	ARTS IIIA deployed (not operational until years later)
	3/79 - 10/79	EARTS deployed
	1979	New York TRACON ARTS IIIA deployed
	Jan 9, 1981	NYT ARTSIII/site commissioning. (At 2:10 am on 9 January 1981, a Lockheed Electra becomes the first aircraft to be handled by the new New York TRACON. Now handling up to 1200 aircraft from the three major New York area airports, the TRACON is the most modern, automated facility in the United States.
	1985	EARTS Mosaic (DTFA01-85-C-00007) (also CA/MSAW) (1984? -1991)
	Sept 1989	ARTS IIIA ISP Contract award (more ARTS HW, FDADs, SSMs, VTC, MCI SW) (DTFA01-89-C00058) (\$44.95M)
Korean ARTS III	1980	Korean ARTS III
	Dec 1980	"selling off" of Korean ARTS
MATCALs	1982	MATCALs award. 17 systems. Control and Communications Subsystems (CCS)
	1983	first MATCALs CCS delivery
	Sept 1986	MATCALs Air Traffic Control Subsystems (the ASR radar subsystem) (3rd & last major subsystem to be produced by Sperry and Selenia) award. AN/TPS-73 radar for MATCALs (17 systems). 1st production delivery June 1991. ATCS shelter - Great Neck; radar - Selenia; Unisys - Auto Tracker. [Other subsystems: All-Weather Landing Subsystem (PAR) (AN/TPN-22) - ITT; AN/TPS-131 Control and Communication Subsystems (CCS) - Unisys]
ARTS IIIIE	April-Sept 1985	New York ARTS IIIIE proposal generation (RFP in early June 19?, 1985, proposal submitted Sept 9, 1985)
	March 14, 1986	Awarded New York TRACON ARTS IIIIE (\$45.6M) in a competition over IBM. (DTFA01-86-C-00006)
	July 1988	New York TRACON ARTS IIIIE Interim Capacity Update (SSM, FDADs, SW mods) went operational.
	April 1989	New York TRACON ARTS IIIIE Stage 1 (IPS, LAN, DPS) went operational (ORD)
	May 18, 1991	New York TRACON ARTS IIIIE Stage 2 (TP, CP, SMC, LAN, DPS) went operational (IOC)
	July 3, 1991	New York TRACON ARTS IIIIE Stage 2 (TP, CP, SMC, LAN, DPS) declared ORD

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	July 28, 1996	DFW ORD on A6.04
	August 24, 1996	NYT A6.04 ORD
	October 22, 1996	Chicago ORD on A6.04
Taiwan ATC	1990	Taiwan Micro-ARTS
	July 1991	IBM/Unisys Taiwan contract award (Micro-EARTS for terminal sites) (Operational in 1996)
German STCA	Dec 1992	German STCA (DERD version) contract award (1991?)
	April 1998	German STCA (P1 version)
Denver Final Monitor Aid	1/93 - 9/93	Denver Final Monitor Aid System Development
	September 21, 1993	Denver Final Monitor Aid System test Completion
Common ARTS	September 4, 1994	Common ARTS contract award (letter award/authorization) (mod to A6.04 ARTS IIIIE contract)
	August 26, 1997	"End" of Common ARTS development contract (handover to FAA); FCA/PCA (main development portion)
	February 12, 1998	ARTS IIE sites start going operational (First four: Atlantic City 2/12/98 IOC; Pensacola 3/9/98 IOC; Roswell 4/30/98 ORD; Reading 4/28/98 IOC)
	2/12/1998 - 5/22/2000 (23?)	ARTS IIE site deployment/operation
	July 24, 1998	Denver Common ARTS IOC
	August 15, 1998	NYT Common ARTS IOC
	August 28, 1998	Chicago Common ARTS IOC (1st IOC) (back to A6.04 on 11/14/98)
	September 14, 1998	SCT Common ARTS IOC
	September 18, 1998	DFW Common ARTS IOC (1st IOC) (back to A6.04 on 11/7/98)
	March 22, 1999	DFW Common ARTS IOC (2nd IOC)
	April 1, 1999	Common ARTS Mosaic start
	April 18, 1999	Chicago Common ARTS IOC (2nd IOC)
	August 1, 1999	Large TRACON contract: award for 3E at Potomac Consolidated Tracon
	August 17, 1999	Common ARTS Radar Gateway (RGW) award
	April 1, 2000	Large TRACON contract: award for 3Es at NCT, MSP and STL
	April 7, 2001	Atlanta Common ARTS IOC
	June 19, 2001	Common ARTS ADS-B development contract award
	September 29, 2001	MSP Common ARTS IOC
	November 26, 2001	Common ARTS Mosaic end (SAR)
	April 27, 2002	St. Louis Common ARTS IOC
	August 28, 2002	NCT Common ARTS IOC
	October 22, 2002	Common ARTS RGW Mosaic task award
	December 14, 2002	PCT Common ARTS IOC
	August 3, 2003	Louisville Common ARTS IOC
	October 30, 2003	Common ARTS Mosaic at Keysite
	July 22, 2004	Common ARTS ADS-B system testing complete at WJHTC
	2004 - 2006	Common ARTS ADS-B evaluations in Louisville

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Micro-EARTS	1/95-12/99	Micro-EARTS (RBDER/Micro-EARTS deployment) (7/11/97 data: Contract: DTFA01-95-C-00009; Contract type: Firm Fixed Price / LOE; Performance Period: Jan 1995 to Dec 1999; Contract Value: \$14,113K; Current Funding: \$10,765K) (The present Micro-EARTS contract, DTFA01-95-C-00009, was awarded to Lockheed Martin in December 1994. The contract included three base years of technical support along with two option years. The FAA, in June 1999, extended the Micro-EARTS contract through the year 2002.) (February 2005: This is the final Program Status Report for the Micro-EARTS contract DTFA01-95-C-00009. Any additional information on contract closeout of this contract will be provided in CDRL A002, Contract Status Report, for the new Micro-EARTS contract (DTFAWA-05-C-00033). The new Micro-EARTS support contract was signed on February 28, 2005.) (From Birkholz on 7/25/05: program E21/E27, POP: 12/28/94 - 12/31/1999, CV/FV: \$15,216,767; program E57/E58, POP: 1/28/00 - 2/28/05, CV: \$32,876,044, FV: \$32,100,899 (est total ~\$47M))
	March 1996	Micro-EARTS operational at WSMR; keystone M4.07
	August 1996?	Micro-EARTS keystone at Anchorage; M4.08
	November 15, 1996	Micro-EARTS Shaw AFB INCO complete on November 15, 1996
	November 26, 1996	Micro-EARTS Ft. Polk ORD on November 26, 1996
	December 12, 1996	Micro-EARTS Anchorage IOC on December 12, 1996
	January 30, 1997	Micro-EARTS White Sands Missile Range ORD on January 30, 1997
	March 13, 1997	Micro-EARTS Guam ORD on March 13, 1997
	May 19, 1997	Micro-EARTS Anchorage ORD planned on May 19, 1997
	March 1998?	Micro-EARTS Honolulu ORD
	June 1998?	Micro-EARTS Nellis ORD
	Sept 1998?	Micro-EARTS San Juan ORD
	Dec 1998?	Micro-EARTS Shaw AFB ORD
	January 1, 2001	Micro-EARTS Capstone start of operational use of ADS-B in Bethel
China COAC ACC/TACC	April 1995	China COAC ACC/TACC
	April 11, 1997	COAC site installs complete
	January 29, 1998	Contract award: China TCCs (ASTEC) (Hong Qiao and Pu Dong)
	March 11, 1999	Contract award: China TCCs (ASTEC) (Nanchang and Hangzhou)
Common ARTS Color Display	May 12, 1999	Initial ACD development contract
	June 16, 2000	Initial RACD development contract (ATL, NCT)
	August 12, 2000	ACD IOC at NYT
	October 10, 2000	ACD IOC at DCA
	April 1, 2004	RACD Phase III award
ASPARCS (planned replacement for MATCALs)	June 29, 2000	ASPARCS award
	October 19, 2001	Complete ASPARCS testing of Micro-EARTS
ARTS IE	September 23, 2001	ARTS IE installed in Prescott, AZ
	July 1, 2003	Vero Beach declared IOC on ARTS IE on 7/1/03
	August 27, 2003	Ft. Pierce ARTS IE HW installed on 8/27/03
	September 4, 2003	Prescott declared IOC on ARTS IE on 9/4/03
	October 16, 2003	Traverse City declared IOC on ARTS IE on 10/16/03
	August 23, 2004	ARTS IE – Key West declared IOC on 23 August.
	September 15, 2004	Grand Canyon declared IOC on ARTS IE on 15 September 2004