FACT SHEET

UNITED STATES AIR FORCE

Office of Information, Rome Air Development Center, Griffiss AFB, N.Y. 13440

F-3

VERONA TEST SITE

Rome Air Development Center's Verona Test Site is located fifteen miles southwest of Griffiss AFB, in Oneida County, New York, on approximately 512 acres of land. This is RADC's largest off-base site.

The facility consists of eight laboratory buildings, nine power stations, a headquarters building, two metal buildings called the "Butler" buildings, specially shielded and used for radio frequency measurements and research; four arctic towers, a supply building, and a Precision Angular Tracking Station (PATS).

The mission of the site is to support engineering evaluation and operational testing of electromagnetic counter-countermeasures, radar (including radar evaluators), communications, millimeter wave research, optical surveillance techniques, 3 dimensional pattern measurements of airborne and ground based antennas utilizing ground and airborne measurement instrumentation.

The twenty-five major items of electronic equipment at the facility consists of radars, communications systems, lasers and ancillary equipment especially instrumented for the collection of engineering data.

A new laboratory, the RADC Satellite Communications Laboratory,

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moved to the Verona Test Site. This facility is used to test the merit of new ideas concerning long-range, point-to-point communications. Some of the areas presently being explored are new antenna configurations automatic station control, signal processing and computerized data collection.

The primary purpose of the Verona Test Site is to support RADC's mission; however, it can be made available to the Air Force, Army, Navy, and other governmental agencies, and contractors, on a cost reimbursable basis.

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Verona Test Site

Rome Air Development Center's test site in the Town of Verona, New York is located approximately fifteen road miles southwest of the City of Rome. It is the largest of sixteen test sites scattered throughout New York State which serve the Center in meeting Air Force requirements in the field of ground electronic research and development.

The Air Force first conceived of such a facility to test and evaluate ground electronic equipment in 1948. Mr. Harold J. Vogel, who has been assigned to the Verona Site since its inception, was one of seven men charged with selecting a site for the Air Force. Of six possible sites under consideration, Verona was selected primarily because of its ideal topography, from both a radar screening and ground clutter view point. Other factors bearing on its selection were: the land was flat, the area thinly populated, and the site was easily accessible to Griffiss Air Force Base at Rome, New York. The 512.46 acres of land for the site was purchased from nine different individuals or estates:[1.]

Anastasia Baranowski

Charles L. Foster

Arthur Henry

Raymond W. Winterton

Elmer L. Combs

Anna T. Sullivan

Harry S. Carpenter

William M. Cassidy

Joseph M. McCutcheon

Joseph F. Agne (.11 acres leased)

Construction on the site began in 1951, at about the same time the Rome Air Development Center was officially established at Griffiss Air Force Base. Construction was completed during 1953. Temporary buildings and radar equipment were transported from the Air Force's Watson Laboratories at Red Bank, New Jersey to provide the site with operational capability during the construction period.

From this beginning, the site today includes a mile-long stretch of nine laboratory buildings, an administrative building, eight power houses, five arctic-type (enclosed) towers and twelve temperate (open) towers. Mr. Robert W. McGregor, Verona Site Commander, states that the site has a total value of $30,000,000. During test program operations, there are an average of 100 persons on the site. The normal compliment consists of 50 permanently assigned civilian and military engineers, technicians, and administrative personnel; in addition there are 7 permanently assigned firemen and 9 permanently assigned security guards. The increase in personnel during test operations variously consist of: engineers, technicians and administrative personnel from other Center organizations; private industry representatives; personnel from other branches of the armed forces; and foreign nationals who are involved in certain tests and evaluations. During some ~~xx~~ tests, the numbers of personnel at the site has swelled to ~~2xx~~ 200.

An important facet to the tests and evaluations conducted at Verona are the air missions flown in support of the tests. Center uses its own flight test aircraft but has also used aircraft from the Air Defense Command, ~~Txxxxxxx~~ Strategic Air Command, Tactical Air Command, the U. S. Navy, ~~and~~ the U. S. Army Helicoptors and aircraft of the United Kingdom. Test aircraft, during test

periods, fly patterns from near ground-level to 50,000 feet and at ranges from the immediate vicinity of the site up to 200 miles away. 3. ~~The technical personnel at the site evaluate the effectiveness of the countermeasure equipment and are able to recommend modification to keep such systems updated.~~

An Aircraft Tracking Radar System and the Precision Angular Tracking Station ~~(PATS)~~ (PATS) are respresentative of the permanent electronic configurations located at the Verona Site. There are more than 20 major radar and communications systems which can be temporarily configured for unique testing needs. At present, the site is assigned responsibility for supporting engineering evaluations and operational testing of electronic counter-countermeasures radar and communications equipments and systems. In addition, it supports the development of techniques for insuring electromagnetic compatibility of Air Force communications, electronic-meteorological equipments, millimeter wave research, optical surveillance and antenna pattern measurements. 4.

Notes (Verona)

1. Project Ownership Map-Dept of the AF, 4 Aug. 64, in ELSM files.
2. Interview by author with H. J. Vogel, 26 Dec. 68.
3. Interview by author with H. J. Vogel, 26 Dec. 68.
4. Mission Statement for the Verona Test Unit, from H. J. Vogel, 26 Dec. 68, in EMCVM files.

SUBJECT

VERONA

EQUIPMENT / CAPABILITIES	USAGE	
	PAST	PRESENT / FUTURE
Nineteen radar systems, high power amplifiers, AN / GSQ-33 computer, video tape recorders, 2 measurement vans, TACAN, AN / FST-2B data processor, video integrating group, 2 ECCM groups, ECM simulator, and stable tracking platform.	Evaluation and testing of ground radars; ECM Engineering Test Facility. Master site for Active Swept Frequency Interferometer Radar (ASFIR)	Engineering eval and oper tests of ECCM, RFI Reduction techniques, radar, communications, millimeter wave research, optical tech, 3-dimension ant. pattern measurements using ground and airborne instrumentation. Supports EM Vulnerability Reduction Testing, spectrum signatures, QFIRC, and furnishes spatial positioning of test aircraft.

VERONA

1. Introduction.

This facility supports engineering evaluation and operational testing of ECCM, Radio Frequency Interference Reduction techniques, radar, communications, millimeter wave research, optical surveillance techniques, and electromagnetic vulnerability testing. The facility also provides special instrumentation for QFIRC, special instrument techniques tests, and precise spatial positioning of test aircraft.

2. Technical Areas. Electromagnetic radiation, optical detection, radar detection, direction finding, and ECCM simulation.

3. Description.

The Verona Electromagnetic Test Facility consists of eight laboratory buildings, nine power stations, a headquarters building, two butler buildings (one specially shielded for RFI measurements and research), four arctic towers, a supply building, and a Precision Angular Tracking Station (PATS). The facility supports engineering evaluation and operational testing of ECCM, radio frequency interference reduction techniques, and optical surveillance techniques. The major items of equipment at the basic facility consists of a number of radar and communication systems plus ancillary equipments specifically instrumented for the collection of the aforementioned engineering data.

4. Major Equipment. The following radars, antennas, communication equipment, airborne equipment, ancillary equipment, and other additional capabilities are currently at the Verona Test Annex.

a. Radars:

(1) AN/FPS-6

(2) AN/FPS-65A (Class)

(3) AN/MSQ-1A

(4) Nike Ajax (XSAM-7)

(5) AN/FPS-74 (Class)

(6) AN/TPS-1D

(7) SG-1B

(8) AN/URN-3A TACAN (Navaid)

(9) TPS-40 (AN/MPS-16)

(10) K and Q Band

(11) SCR-584

(12) ASFIR (not installed; need notice)

(13) FRS-6B

(14) FPS-16

b. Antennas:

(1) AT-197/GR

(2) AS-505/GR

(3) AS-1097/GR

(4) AS-726/GR

c. Communications:

(1) AN/FRT-60

(2) AN/GRC-27

(3) BC-639

(4) BC-640

(5) BC-610

(6) AN/MRC-98

(7) AN/FRC-68

(8) KWT6-5B (will replace BC-610)

(9) RT723/GR (will replace 639 and 640)

(10) Satellite Communications

(11) Operations Room

d. Ancillary Equipment:

(1) AN/MSQ-16

(2) VR-1000

(3) AN/FST-2B (Class)

(4) AN/MK-444 (transmitter kit AN/FPS-20) (Class) to MK-444/FPS-20 (transmitter kit AN/FPS-20) (class)

(5) AN/USQ-23V

(6) ECCM Groups (AN/GPA-102 and OA 2325) (Class) to ECCM Groups (AN/GPA-102 + OA-2325/FPS-6) (class).

(7) AN/GPA-98A (ECM Simulator)

(8) AN/GPA-98A (XW-1) (Class)

(9) AN/MPX-7

(10) AN/GPA-101 (Class)

(11) AN/UYK-1

e. Additional Capabilities:

(1) Precision Angular Tracking System (PATS)

(2) New York State Tropo Link (See Youngstown)

(3) Timing for all of GAFB (Master Standard)

f. Future:

(1) Precision Antenna Measurement System (PAMS)

(2) Test Range for Electronically Steerable Phased Array Systems (TRESPAS)

(3) Auto-Adaptable ECCM Radar Testbed Facility

(4) ROMANS (See Stockbridge)

(5) 4 EYES - Flintstone Simulator (Class)

RADC's Verona Test Site

Verona is a small, desolate, out-of-the-way place. But it does have the distinction of housing RADC's largest and most important test site. Nothing about the test site is small or desolate.

The test facility is operated by RADC's Communication Division, Electromagnetic Vulnerability Branch, Measurement Section.

Harold Vogel, only original Verona staff member still at the site, said the Air Force first conceived the facility in 1948. Six sites were chosen and each were screened with radar to study the suitability of the area. Verona was judged best and construction was started in 1951.

Mr. Vogel mentioned that Col. Richard Cosel, Chief of Communications, RADC, and John Zeock, base photographer, were also in the original Verona party.

The site, located 15 miles SW of Griffiss, is a mile-long stretch of buildings, towers and radomes. Eight permanent laboratory buildings, with associated power plants, house all electronics equipment.

Bob McGregor, site commander, said Verona has a total value of $30 million. McGregor added that the site maintains a crew of 100. This number consists of engineers, electronic technicians, civil engineers and administrators. A fire department and police patrol is also on full time duty.

Verona, besides its support of RADC missions, has added greatly to the research capabilities of all branches of the Aremed Forces. Western Ally powers such as Canada, Japan and Germany have also been aided by the sites facilities.

Private industry has also used Verona to its fullest advantage. In early 1967, Raytheon Co., conducted experiments on predetection signal processing, utilizing the Verona site. The tests not only benefitted Raytheon but the data, when passed on to RADC, proved invaluable to the military.

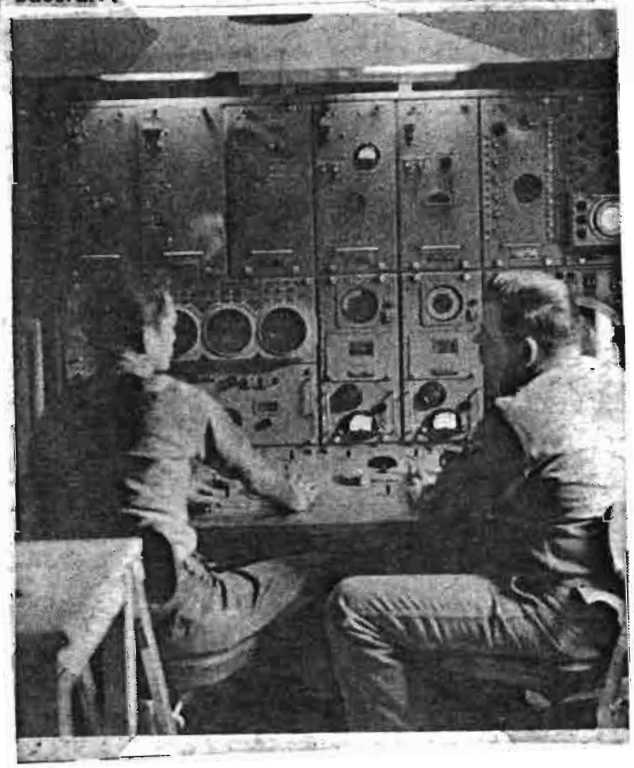
According to Mr. McGregor, aircraft outfitted with the latest types of airborne electronic countermeasures (ECM) and jamming equipment are flown in missions simulating enemy action.

The RADC personnel at Verona can then evaluate the effectiveness of the ecm. Variations can then be made to keep the systems up to date.

Latest addition to the vast electronics network of Verona is PATS, the Precision Angular Tracking Station. PATS was designed and developed by RADC to provide the Air Force with a ground-based precision tracking platform.

Radar testing, tracking and electronic improvements are all a part of continuing air supremecy. Verona Test Site of RADC is doing its part.

TESTING AIRBORNE EQUIPMENT -- is a major task of Verona's personnel. John Koscielniak and Tom Yancey (seated, left to right) are measuring antenna patterns to fix locations of radar sites. Checking results from previous tests are (left to right) Betty McConnell, Harold Russell and Tom Baustart.



OVER →

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HAZARDOUS MATERIALS DATA

DATE (YYMMDD): 8 6 1 1 1 8

WORKPLACE IDENTIFIER:

BASE: GRIFFISS AFB

ORGANIZATION: VERONA (RADC)

WORKPLACE: LITTLE SHACK BEHIND RADAR

BLDG NO / LOCATION: BEHIND GUARD SHACK

ROOM / AREA:

MATERIAL NOMENCLATURE (Manufacturer & Major Ingredients)	NATIONAL STOCK NUMBER (or NIOSH Number)	SPECIFICATION (MIL or FED)	MSDS ON FILE? (Y or N)	QUANTITY USED (per day,wk,mo,yr)	DISPOSAL METHOD (recycle,in process,etc.)	IEX CODE (8,9,none)	POTENTIAL HAZARD (Y or N)			
							Inh	Abs	Ing	Con
HOPPES COMPANY 2000 PRIMER	8010-00-889-8825	TT-P-1757	Y	5-13 gal CAN/YR	IN PROCESS	9				
ALIPHATIC HYDROCARBONS	1001501AH	N/A								
BUTYL ALCOHOL	EK8750000	N/L								
XYLOL	ZE2100000	N/L								
ZINC CHROMATE PIGMENT	ZH1505000	N/L								
DENATURED ALCOHOL	6810-00-205-6786	-	Y	19T/6 MO	IN PROCESS					
ETHYL ALCOHOL	KQ6300000									
METHYL ALCOHOL	PC1400000									
DUBOIS CHEMICH ELECTRICAL COATING	6850-00-003-1194	MIL-C-83360C	Y	16 gal (2)/6 MO	IN PROCESS	NONE				
FLUOROCARBON PROPELLANT	10000128FC	45%								
AROMATIC SOLVENT	100000 7AH	20%								

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HAZARDOUS MATERIALS DATA

DATE (YYMMDD): 8 6 / 1 / 1 8

WORKPLACE IDENTIFIER:

BASE: GRIFFISS AFB

ORGANIZATION: VERONA (RADC)

WORKPLACE: LITTLE SHACK BEHIND RADAR

BLDG NO / LOCATION: BEHIND GUARD SHACK.

ROOM / AREA:

MATERIAL NOMENCLATURE (Manufacturer & Major Ingredients)	NATIONAL STOCK NUMBER (or NIOSH Number)	SPECIFICATION (MIL or FED)	MSDS ON FILE? (Y or N)	QUANTITY USED (per day,wk,mo,yr)	DISPOSAL METHOD (recycle,in process,etc.)	IEX CODE (8,9,none)	POTENTIAL HAZARD (Y or N)			
							Inh	Abs	Ing	Con
AMERICAN [illegible] CO. LUBRIC	9150-00-542-1430	MIL-L-7870A	Y	7-40#/6 mo	IN PROCESS	9				
LUBE OIL (MIST)	100002760	100%								
GREASE				35GAL/YR						
OILS: LUB, MINERAL										
LATEX PAINTS.										

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HAZARDOUS MATERIALS DATA

DATE (YYMMDD): 86/11/18

WORKPLACE IDENTIFIER:

BASE: GRIFFISS AFB

ORGANIZATION: VERONA (RADC)

WORKPLACE: OPTICAL LAB

BLDG NO / LOCATION: —

ROOM / AREA: —

MATERIAL NOMENCLATURE (Manufacturer & Major Ingredients)	NATIONAL STOCK NUMBER (or NIOSH Number)	SPECIFICATION (MIL or FED)	MSDS ON FILE? (Y or N)	QUANTITY USED (per day, wk, mo, yr)	DISPOSAL METHOD (recycle, in process, etc.)	IEX CODE (8,9,none)	POTENTIAL HAZARD (Y or N)			
							Inh	Abs	Ing	Con
[redacted]	6810-00-205-6786	—	Y	6 gal/yr	IN PROCESS					
ETHYL ALCOHOL	KQ6300000	MIL								
METHYL ALCOHOL	PC1400000	M/L								
[redacted] METHANOL	6810-00-597-3608	O-M-232	Y	16AL/6 MO	IN PROCESS					
METHANOL	PC1400000	100%								
[redacted] METHANOL				54gal/yr						
[redacted] USED LASER DYE	7930-00-045-6923		ORDERED	16AL/						
COUMARIN 504										
(1) BENZOPEPANO										
METHANOL										
N,N-DIMETHYL FORMAMIDE				16AL/						
METHANOL w/COUMARIN DYE IN IT										
OILS: LUB, MOTOR										

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HAZARDOUS MATERIALS DATA

DATE (YYMMDD): 8 6 / 1 1 / 1 8

WORKPLACE IDENTIFIER:

BASE: GRIFFISS AFB

ORGANIZATION: VERONA (RADC)

WORKPLACE: OPTICAL LAB

BLDG NO / LOCATION:

ROOM / AREA:

MATERIAL NOMENCLATURE (Manufacturer & Major Ingredients)	NATIONAL STOCK NUMBER (or NIOSH Number)	SPECIFICATION (MIL or FED)	MSDS ON FILE? (Y or N)	QUANTITY USED (per day,wk,mo,yr)	DISPOSAL METHOD (recycle,in process,etc.)	IEX CODE (8,9,none)	POTENTIAL HAZARD (Y or N)			
							Inh	Abs	Ing	Con
[redacted] DYE SEYMOUR OF SYCAMORE	6850-00-664-9067	MIL-L-83795	Y	1PT/MO	IN PROCESS	8				
a) ISOBUTYL ACETATE	AI4025000	40%								
b) METHYLENE CHLORIDE	ZE2100000	20%								
c) METHYL ISOBUTYL KETONE		10%								
d) ISOPROPYL ALCOHOL		20%								
[redacted] SEYMOUR OF SYCAMORE	8010-00-584-3149	CIA A-A-65A	Y	1PT/6MO	IN PROCESS	8				
a) TOLUENE	XS525 0000	19.6%								
b) XYLENE	ZE2100000	2.84%								
c) METHYLENE CHLORIDE	PL5775000	24.6%								
d) PROPANE		18.0								
[redacted]	8010-00-616-9143	TT-E-527	Y	13 gal CAN/MO	IN PROCESS	NONE				
a) MINERAL SPIRITS	SE7555 000	11%								
b) METHYLENE CHLORIDE	PL5775000	39%								
c) VM&P NAPTHA	SE7555 000	7%								

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HAZARDOUS MATERIALS DATA

DATE (YYMMDD): 86/1/18

WORKPLACE IDENTIFIER:

BASE: GRIFFISS AFB

ORGANIZATION: VERONA (RADC)

WORKPLACE:

BLDG NO / LOCATION: 1287

ROOM / AREA:

MATERIAL NOMENCLATURE (Manufacturer & Major Ingredients)	NATIONAL STOCK NUMBER (or NIOSH Number)	SPECIFICATION (MIL or FED)	MSDS ON FILE† (Y or N)	QUANTITY USED (per day, wk, mo, yr)	DISPOSAL METHOD (recycle, in process, etc.)	IEX CODE (8,9,none)	POTENTIAL HAZARD (Y or N)			
							Inh	Abs	Ing	Con
3M Co. [illegible] ADHESIVE	8040-00-273-8717	MIL-A-1154	Y			9				
TOLUENE	XS5250000									
ACETONE	AL3150000									
ALIPHATIC PETROLEUM DISTILLATE	1001292PD									
ZINC OXIDE	ZH4810000									
MAGNESIUM OXIDE	OM3850000									
ADHESIVE, SILICONE SEALANT, [illegible]	8040-00-225-4548		Y	10.3 OZ/6 MO	IN PROCESS	8				
ACETOXYSILANE		10%								
[illegible] ELASTOMER [illegible]	—		Y			9				
[illegible] RUBBER BASE [illegible]	8040-00-262-9011	—	Y			8				
ACETONE / TOLUENE										
CYCLOHEXANONE										
METHYL ETHYL KETONE.										
PROPYLENE OXIDE										

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HAZARDOUS MATERIALS DATA

DATE (YYMMDD): 96/1/1/8

WORKPLACE IDENTIFIER:

BASE: GRIFFISS AFB

ORGANIZATION: VERONA (RADC)

WORKPLACE:

BLDG NO / LOCATION: 1287

ROOM / AREA: N/A

MATERIAL NOMENCLATURE (Manufacturer & Major Ingredients)	NATIONAL STOCK NUMBER (or NIOSH Number)	SPECIFICATION (MIL or FED)	MSDS ON FILE? (Y or N)	QUANTITY USED (per day,wk,mo,yr)	DISPOSAL METHOD (recycle,in process,etc.)	IEX CODE (8,9,none)	POTENTIAL HAZARD (Y or N)			
							Inh	Abs	Ing	Con
[redacted]	8040-00-843-0802	—	Y	2-7.8 oz tubes/yr	IN PROCESS	- - -				
[redacted]	3439-00-419-5004	—	Y	16 oz CAN/YR	IN PROCESS	8				
[redacted]	5970-00-962-3335	—	Y	15 oz CAN/YR	IN PROCESS	8				
METHYL ETHYL KETONE	EL6475000	N/A								
TOLUENE	XS5250000	N/A								
[redacted]	6810-00-205-6786	—	Y	1 qt/6 mo	IN PROCESS					
ETHYL ALCOHOL	KQ6300000									
METHYL ALCOHOL	PC1400000									
[redacted]	8030-00-229-8735	—	Y	1 lb/yr	IN PROCESS					
EPOXY RESIN HARDENER	1000131 ER									
[redacted]	6850-00-935-1082	—	Y	6 qt/2 MONTH	IN PROCESS					
TRICHLOROTRIFLUOROETHANE	KJ4000000									

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HAZARDOUS MATERIALS DATA

DATE (YYMMDD): 861118

WORKPLACE IDENTIFIER:

BASE: GRIFFISS AFB

ORGANIZATION: VERONA (RADC)

WORKPLACE: -

BLDG NO / LOCATION: 1253

ROOM / AREA: N/A

MATERIAL NOMENCLATURE (Manufacturer & Major Ingredients)	NATIONAL STOCK NUMBER (or NIOSH Number)	SPECIFICATION (MIL or FED)	MSDS ON FILE† (Y or N)	QUANTITY USED (per day, wk, mo, yr)	DISPOSAL METHOD (recycle, in process, etc.)	IEX CODE (8, 9, none)	POTENTIAL HAZARD (Y or N)			
							Inh	Abs	Ing	Con
HOPPERS COMPANY ZINC PRIMER	8010-00-899-8825	TT-P-1757	Y	10.85 GAL/YR	IN PROCESS	9				
ALIPHATIC HYDROCARBONS	1001501A H	N/A								
BUTYL ALCOHOL	EK 8750000	N/A								
XYLOL	ZE 2100000	N/L								
ZINC CHROMATE PRIMER	ZH 150 5000	N/L								
DENATURED ALCOHOL	6810-00-205-6786	-	Y	180/6 MO	IN PROCESS					
ETHYL ALCOHOL	KQ 6300000	N/L								
METHYL ALCOHOL	PC 14 00000	N/L								
SCOTCHKOTE ELECTRICAL COATING	5970-00-962-3335	-	Y	2-15 GAL/YR	IN PROCESS	8				
METHYL ETHYL KETONE	EL 6475000	N/A								
TOLUENE	XS 5250000	N/A								
TRIAD PAINT COMPANY PAINT	8010-00-616-4010	TT-P-81E	Y	2-16 GAL/6 MO	IN PROCESS					
SOLVENTS	100009,55	17%								

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HAZARDOUS MATERIALS DATA

DATE (YYMMDD): 8 6 1 1 1 8

WORKPLACE IDENTIFIER:

BASE: GRIFFISS AFB

ORGANIZATION: VERONA (RADC)

WORKPLACE: —

BLDG NO / LOCATION: 1253

ROOM / AREA: —

MATERIAL NOMENCLATURE (Manufacturer & Major Ingredients)	NATIONAL STOCK NUMBER (or NIOSH Number)	SPECIFICATION (MIL or FED)	MSDS ON FILE? (Y or N)	QUANTITY USED (per day, wk, mo, yr)	DISPOSAL METHOD (recycle, in process, etc.)	IEX CODE (8, 9, none)	POTENTIAL HAZARD (Y or N)			
							Inh	Abs	Ing	Con
ROYAL LUBRICANTS INC RELEASE AGENT	9150-00-141-6770	MIL-G-25013D	Y							
METHYL PHENYL SILICONE OIL	10000843MS									
MONOCHORO TRIFLUOROETHYLENE POLYMER	10000835MP									
DIATOMACEOUS CLAY	10000619DC									
SODIUM PETROLEUM SULFONATE	10000676SP									
METHYL DIOCTYL DIPHENYLAMINE	10000836MD									
LATEX PAINTS				16 GAL/YR	IN PROCESS					
ADHESIVE PRIMER/SEALANT KIT DOW CHEMICAL	8040-00-225-4548		Y	10.3-8/6 MO	IN PROCESS	8.				
ACETOXYSILANE		10%								
PC. BOARD DEVELOPING SOLNS										
PAINT THINNER										
ETCH RESIST SENSITIZER										
GREASE/LUBE OILS										
ASBESTOS FIBRE TAR/SEALANT.										

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HAZARDOUS MATERIALS DATA

DATE (YYMMDD): 861118

WORKPLACE IDENTIFIER | BASE

ORGANIZATION: VERONA (RADC) | WORKPLACE: — | BLDG NO / LOCATION: 1279 | ROOM / AREA: N/A

MATERIAL NOMENCLATURE (Manufacturer & Major Ingredients)	NATIONAL STOCK NUMBER (or NIOSH Number)	SPECIFICATION (MIL or FED)	MSDS ON FILE? (Y or N)	QUANTITY USED (per day, wk, mo, yr)	DISPOSAL METHOD (recycle, in process, etc.)	IEX CODE (8, 9, none)	POTENTIAL HAZARD (Y or N)			
							Inh	Abs	Ing	Con
DENATURED ALCOHOL	6810-00-205-6786	—	Y	5QT/YR	IN PROCESS					
ETHYL ALCOHOL	KQ6300000	N/L								
METHYL ALCOHOL	PC1400000	N/L								
[redacted]	6850-00-105-3084	MIL-C-81302	Y	2-13gCAN/6MO	IN PROCESS	NONE				
TRICHLOROTRIFLUOROETHANE	KJ4000000	75%								
CARBON DIOXIDE (AS PROPELLANT)	FF6400000	25%								
[redacted]	9150-00-823-7860	—	Y	1PT/6MO	IN PROCESS					
ISOBUTANE/PROPANE MIXTURE	10002571P									
TRICHLOROTRIFLUOROETHANE	KJ4000000									
1,1,1-TRICHLOROETHANE	KJ2975000									
SILICONE	VW1620000									
SCOTCH-LOK ELECTRICAL COATING 3M	5970-00-962-3335	N/A	Y	2-15LBS/6MO	IN PROCESS					
METHYL ETHYL KETONE	EL6475000									
TOLUENE	XS5250000									

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HAZARDOUS MATERIALS DATA

DATE (YYMMDD): 9 0 6 1 1 1 1 8

WORKPLACE IDENTIFIER:

BASE: GRIFFISS AFB

ORGANIZATION: VERONA (RADC)

WORKPLACE:

BLDG NO / LOCATION: 1271

ROOM / AREA: N/A

MATERIAL NOMENCLATURE (Manufacturer & Major Ingredients)	NATIONAL STOCK NUMBER (or NIOSH Number)	SPECIFICATION (MIL or FED)	MSDS ON FILE? (Y or N)	QUANTITY USED (per day,wk,mo,yr)	DISPOSAL METHOD (recycle,in process,etc.)	IEX CODE (8,9,none)	POTENTIAL HAZARD (Y or N)			
							Inh	Abs	Ing	Con
SCOTCHKOTE ELECTRICAL COATING	5970-00-962-3335	—	Y	15oz CAN/YR	IN PROCESS	8				
METHYL ETHYL KETONE	EL 6475000	N/A	Y							
TOLUENE	XS525 0000	N/A								
LOADERS COMPANY ENG PRIMER	8010-00-899-8825	TT-P-1757	Y	5-15oz CAN/YR	IN PROCESS	9				
ALIPHATIC HYDROCARBONS	100150 1AH	N/A								
BUTYL ALCOHOL	EK875 0000	N/A								
XYLOL	ZE 2100000	N/A								
ZINC CHROMATE PIGMENT	ZH 1505000	N/A								
ADHESIVE CYANOACRYLATE	8040-00-142-9193	—	N	2oz/YR	IN PROCESS	9				
DENATURED ALCOHOL	6810-00-205-6796	—	Y	1gal/6 mo	IN PROCESS					
ETHYL ALCOHOL	KQ 6300000	N/A	N							
METHYL ALCOHOL	PC 14 00000	N/A								

AF FORM JAN 82 2761

(Use this space for mechanical imprint)

HAZARDOUS MATERIALS DATA

DATE (YYMMDD): 8 6 1 1 1 8

WORKPLACE IDENTIFIER:

BASE: GRIFFISS AFB

ORGANIZATION: VERONA (RADC)

WORKPLACE: —

BLDG NO / LOCATION: 1227

ROOM / AREA: —

MATERIAL NOMENCLATURE (Manufacturer & Major Ingredients)	NATIONAL STOCK NUMBER (or NIOSH Number)	SPECIFICATION (MIL or FED)	MSDS ON FILE? (Y or N)	QUANTITY USED (per day,wk,mo,yr)	DISPOSAL METHOD (recycle,in process,etc.)	IEX CODE (8,9,none)	POTENTIAL HAZARD (Y or N)			
							Inh	Abs	Ing	Con
DENATURED ALCOHOL	6810-00-205-6786	—	Y	180 / 6 mo	IN PROCESS					
a) ETHYL ALCOHOL	KQ6300000	M/L								
b) METHYL ALCOHOL	PC1400000	M/L								
ISOPROPYL ALCOHOL	6505-00-299-8095	100%	Y	56AL / YR	IN PROCESS					
LUBRICATING COMPOUND SLYDE BOLP CHEMICAL	9150-00-823-7860	—	Y		IN PROCESS					
a) TRICHLOROTRIFLUOROETHANE	KJ4000000	37%								
b) METHYL CHLOROFORM	KJ2975000	35%								
SEYMOUR OF SYCAMORE PRIME	9010-00-616-9151	TT-P-605	Y	16 OZ / 3 mo	IN PROCESS	8				
a) VM P NAPTHA	7555000SE	4.6 %								
b) TOLUOL	5250000XF	31.3%								
c) METHYL ISOBUTYL KETONE	9275000SA	2.2%								
d) PROPANE	2275000TX	14.6%								
e) ISOBUTANE	243000COT	14.6%								

AF FORM JAN 82 2761

MATERIAL NOMENCLATURE (Manufacturer & Major Ingredients)	NATIONAL STOCK NUMBER (or NIOSH Number)	SPECIFICATION (MIL or FED)	MSDS ON FILE ? (Y or N)	QUANTITY USED (per day,wk,mo,yr)	DISPOSAL METHOD (recycle,in process,etc.)	IEX CODE (8,9,none)	POTENTIAL HAZARD (Y or N)			
							Inh	Abs	Ing	Con
LUBE OILS										
LATEX PAINTS				11GAL/YR	IN PROCESS					

U.S. G.P.O. 1983-380-979/520

MATERIAL NOMENCLATURE (Manufacturer & Major Ingredients)	NATIONAL STOCK NUMBER (or NIOSH Number)	SPECIFICATION (MIL or FED)	MSDS ON FILE ? (Y or N)	QUANTITY USED (per day,wk,mo,yr)	DISPOSAL METHOD (recycle,in process,etc.)	IEX CODE (8,9,none)	POTENTIAL HAZARD (Y or N)			
							Inh	Abs	Ing	Con
DOW CORNING SILICONE COMPOUND	6850-00-177-5044	MIL-S-8660	Y		IN PROCESS					
SILICONE COMPOUND	1000137SC									
LUBE OILS				3-55gal drums /6 mo	RECYCLE	NONE				
LATEX PAINTS										

U.S. G.P.O. 1983-380-979/520

MATERIAL NOMENCLATURE (Manufacturer & Major Ingredients)	NATIONAL STOCK NUMBER (or NIOSH Number)	SPECIFICATION (MIL or FED)	MSDS ON FILE ? (Y or N)	QUANTITY USED (per day, wk, mo, yr)	DISPOSAL METHOD (recycle, in process, etc.)	IEX CODE (8, 9, none)	POTENTIAL HAZARD (Y or N)			
							Inh	Abs	Ing	Con
ADHESIVE 732 RTV SEALANT DOW CHEMICAL	8040-00-225-4548		Y	4-10, 30 ℄/YR	IN PROCESS	8				
ACETOXYSILANE		10%								
PARKS' EUM TURPENTINE (1 GAL)										
9-1 GAL CANS OF LATEX PTS.										
LUBE OILS										
PAINTS										
ETCHANTS										

☆U.S. G.P.O. 1983-380-979/520

MATERIAL NOMENCLATURE (Manufacturer & Major Ingredients)	NATIONAL STOCK NUMBER (or NIOSH Number)	SPECIFICATION (MIL or FED)	MSDS ON FILE ? (Y or N)	QUANTITY USED (per day, wk, mo, yr)	DISPOSAL METHOD (recycle, in process, etc.)	IEX CODE (8,9,none)	POTENTIAL HAZARD (Y or N)			
							Inh	Abs	Ing	Con
[illegible] PAINT	5610-00-141-7838	MIL-C-5044C	Y	4-1 GAL/YR	IN PROCESS	8				
MINERAL SPIRITS	BE 7555 000	0.4%								
BUTYL ACETATE	EO0700000	23%								
TOLUOL	XV 14 00000	5.6%								
VMPP NAPTHA	BE7555000	40.9%								
BUTYRALDEHYDE OXIME	EP350000	0.5%								
BULK CHEMICAL CLEANING COMPOUND	6850-00-419-5004	N/A	Y	16GB/YR	IN PROCESS	9				
TRICHLOROTRIFLUOROETHANE	KJ4000000									
METHYLENE CHLORIDE	PA8050000									
DUBOIS CHEMICAL ELECTRICAL COATING	6850-00-003-1194	MIL-C-83300	Y	16GB/6 MO (4)	IN PROCESS					
FLUOROCARBON PROPELLANT	1000128FC	45%								
AROMATIC SOLVENT	100000 7AH	20%								
ARMSTRONG PRODUCTS COMPANY OLEY HORSLUE	8040-00-154-4846	MMM-A-136	Y	2GB/4 MO	IN PROCESS					
EPOXY RESIN	10000131 ER	40%								
VINYL RESIN	10000171 VR	17%								
FILLER	1000333FU	23%								

U.S. G.P.O. 1983-380-979/520

MATERIAL NOMENCLATURE (Manufacturer & Major Ingredients)	NATIONAL STOCK NUMBER (or NIOSH Number)	SPECIFICATION (MIL or FED)	MSDS ON FILE ? (Y or N)	QUANTITY USED (per day,wk,mo,yr)	DISPOSAL METHOD (recycle,in process,etc.)	IEX CODE (8,9,none)	POTENTIAL HAZARD (Y or N)			
							Inh	Abs	Ing	Con
KOPPERS COMPANY ZINC PRIMER	8010-00-899-8825	TT-P-1757	Y	7-16 GAL/MO	IN PROCESS	9				
ALIPHATIC HYDROCARBONS	1001501AH	N/L								
BUTYL ALCOHOL	EK8750000	N/L								
XYLOL	ZE2100000	N/L								
ZINC CHROMATE PIGMENT	ZH1505000	N/L								
ADHESIVE CYANOACRYLATE	8040-00-142-9193	MIL-A-46050C	N	2 GAL/YR	IN PROCESS	9				
CHEMSCORE CORPORATION INSECT REPELLANT	6840-00-082-2541		Y	6 OZ/6 MONTH	IN PROCESS					
DIETHYLTOLUAMIDE	XB3675000									
DICHLORO DIFLUOROMETHANE	PA8200000									
PROPANE FUEL										
OILS: MOTOR LUBE										
LATEX PAINTS										
KEROSENE										

U.S. G.P.O. 1983-380-979/520

MATERIAL NOMENCLATURE (Manufacturer & Major Ingredients)	NATIONAL STOCK NUMBER (or NIOSH Number)	SPECIFICATION (MIL or FED)	MSDS ON FILE ? (Y or N)	QUANTITY USED (per day,wk,mo,yr)	DISPOSAL METHOD (recycle,in process,etc.)	IEX CODE (8,9,none)	POTENTIAL HAZARD (Y or N)			
							Inh	Abs	Ing	Con
AEROSOL LUBE OIL BULK CHEMICALS	9150-00-458-0075	VV-L-800	Y	16oz / 6 mo	IN PROCESS	9				
a) TRANSFORMER OIL	10017437 0	97%								
DELUX ENAMEL DUPONT			Y	19 - 16 oz CAN / yr	IN PROCESS	9				
a) AROMATIC HYDROCARBONS										
b) TOLUENE										
c) XYLENE										
LUBRICATING COMPOUND, SLYDE BULK CHEMICAL	9150-00-923-7860		Y							
a) TRICHLOROTRIFLUOROETHANE		37%		16oz can / 6 mo	IN PROCESS	NONE				
b) METHYL CHLOROFORM		35%								
KEROSENE		100%	-							
KODAK DEVELOPER DK-50 KODAK DEVELOPER D-19										
TURNER PROPANE FUEL			-	5 - 14.1 oz CAN						
NITRIC ACID										
ORTHO INSECT FOGGER										
JOSEPH DIXON CRUCIBLE COMPANY GRAPHITE POWDER										
GULF-LITE CHARCOAL STARTER										
OILS										

U.S. G.P.O. 1983-380-979/520

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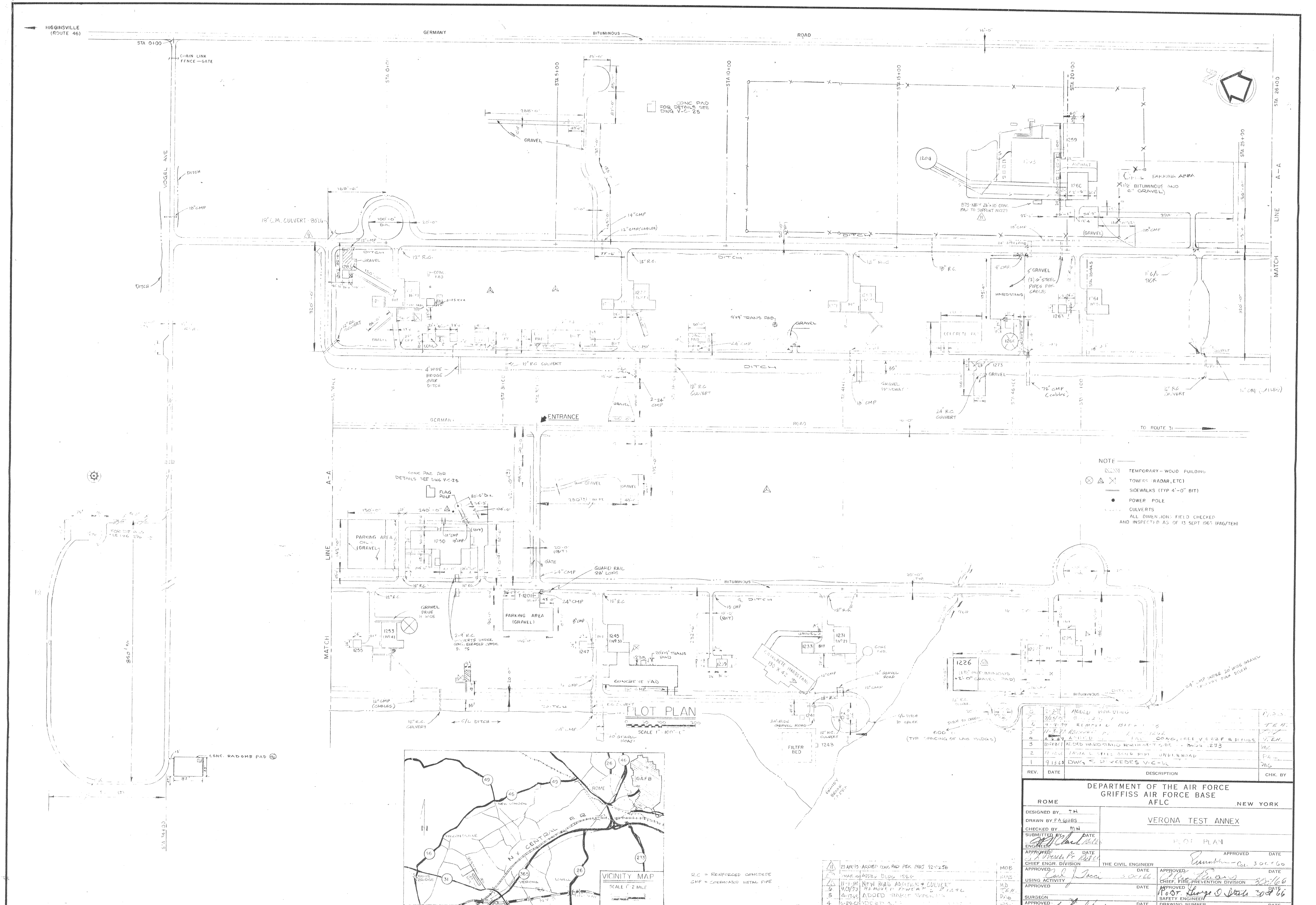
							Inh	Abs	Ing	Con
ILLINOIS BRONZE PAINT CO. PAINT	8010-00-721-9750	TT-L-506	Y	7-13.3 CAN/DAY	IN PROCESS	8				
CELLOSOLVE ACETATE	KK8825000	2.4%								
TOLUENE	XS5250000	19.3%								
METHYLENE CHLORIDE	PA9050000	29.3%								
PROPELLANT	100009SPT	32.0%								
PACIFIC AEROSOL PAINT	8010-00-582-5382	TT-L-50	Y	2-13.33 CAN/DAY	I.N PROCESS	NONE				
TOLUENE	XS5250000	19%								
ACETONE	AC3150000	45%								
BUTYL ACETATE	AF7380000	6%								
BUTYL CELLOSOLVE	KJ8575000	2%								
ISOBUTANE	TZ4300000	14%								
CELESTRIUM INC. LUBRISOLID FILM	9150-00-985-7255	MIL-L-81310	Y		IN PROCESS	9				
TOLUENE	XS5250000	30%								
METHYL ISOBUTYL KETONE	SA9275000	33.8%								
ISOPROPYL ALCOHOL	NT8050000	6.7%								
LEAD PHOSPHITE	10000926LM	6.7%								
PHENOLIC RESIN	10000 2SORE	3.5%								

U.S. G.P.O. 1983-380-979/520



NOTE —
- TEMPORARY – WOOD BUILDING
- TOWERS (RADAR, ETC)
- SIDEWALKS (TYP 4'-0" BIT)
- POWER POLE
- CULVERTS

ALL DIMENSIONS FIELD CHECKED AND INSPECTED AS OF 13 SEPT 1963 (PAG/TEH)

R.C = REINFORCED CONCRETE
CMP = CORRUGATED METAL PIPE

REV.	DATE	DESCRIPTION	CHK. BY
11	23 APR 93	ADDED CONC PAD PER PROJ 92-0256	MOB
10	7 MAR 91	ADDED BLDG 1226	RMB
9	11-9-84	NEW ROAD ADDITION + CULVERT	MD
6	4/3/73	REMOVED TOWER [illegible] 1296	TEH
5	4-17-69	ADDED STABLE TRACKING	PAG
4	6-29-67	ADDED [illegible]	PAG

REV.	DATE	DESCRIPTION	CHK. BY
8	2-3-77	ADDED BUILDING	P.S.S.
7	7/25/75	[illegible]	[illegible]
6	4-8-74	REMOVED BLDG [illegible]	TEH
5	11-3-7[illegible]	REMOVED [illegible] 1262	[illegible]
4	2-[illegible]-69	ADDED [illegible] PAD CONC, (SEE V-C-28 FOR DETAILS)	TEH
3	20 FEB 61	ADDED HARDSTAND NORTHWEST SIDE OF BLDG 1293	PAG
2	10-12-66	INSTALL STEEL COND PIPE UNDER ROAD	PA[illegible]
1	9-13-63	DWG SUPERCEDES V-C-1a	PAG

DEPARTMENT OF THE AIR FORCE
GRIFFISS AIR FORCE BASE
AFLC
ROME, NEW YORK

DESIGNED BY TH
DRAWN BY PA GIBBS
CHECKED BY MH

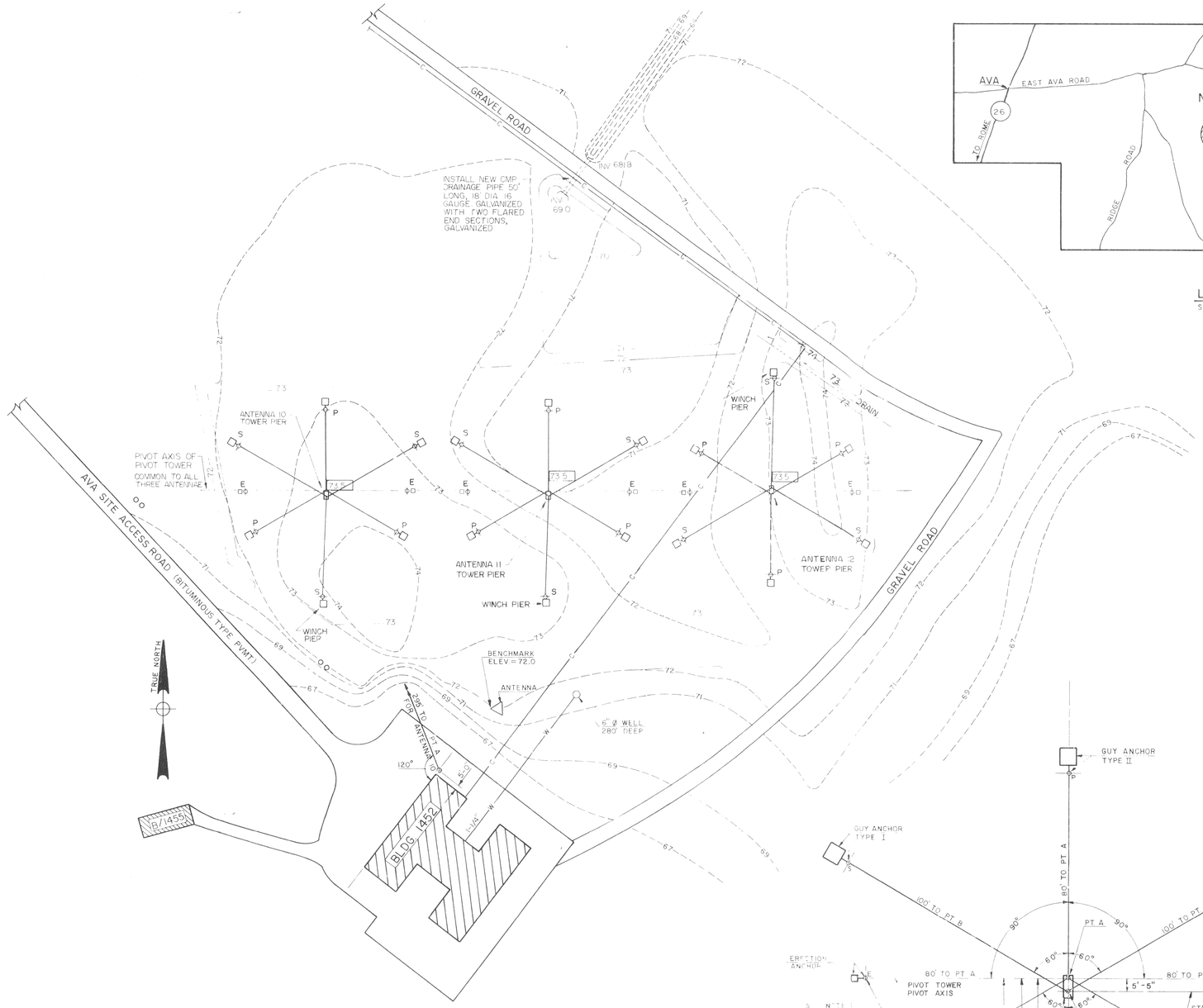
VERONA TEST ANNEX
PLOT PLAN

SUBMITTED BY [signature] DATE — ENGINEER
APPROVED [signature] DATE — CHIEF ENGR. DIVISION
THE CIVIL ENGINEER — APPROVED [signature] Col. DATE 30 Oct 60
APPROVED [signature] DATE 3 Oct 66 — USING ACTIVITY
APPROVED [signature] DATE 30 Oct 66 — CHIEF, FIRE PREVENTION DIVISION
APPROVED DATE — SURGEON
APPROVED Robt. George D. [signature] DATE 30 Oct 66 — SAFETY ENGINEER
APPROVED [signature] DATE 3 Oct 66 — CHIEF, PROGRAM & MASTER PLANNING DIV.
DRAWING NUMBER V-C-1 — DATE 9/13/63
SHEET ___ OF ___

ROAMA FORM 112, JAN 60

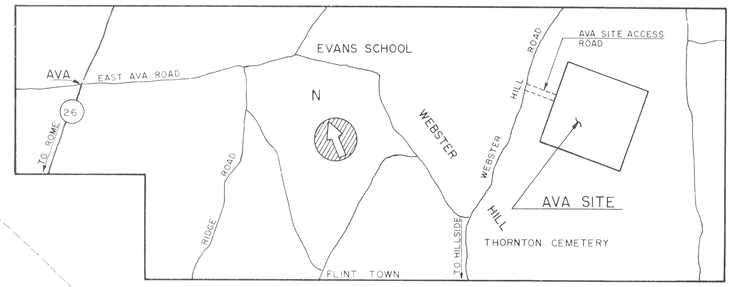
STANDARD DRAWING FORM

V-C-1



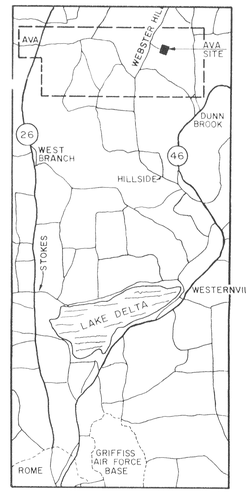
SITE PLAN—RLP ANTENNA

SCALE: 1" = 50'



LOCATION MAP

SCALE 1" = ½ MILE

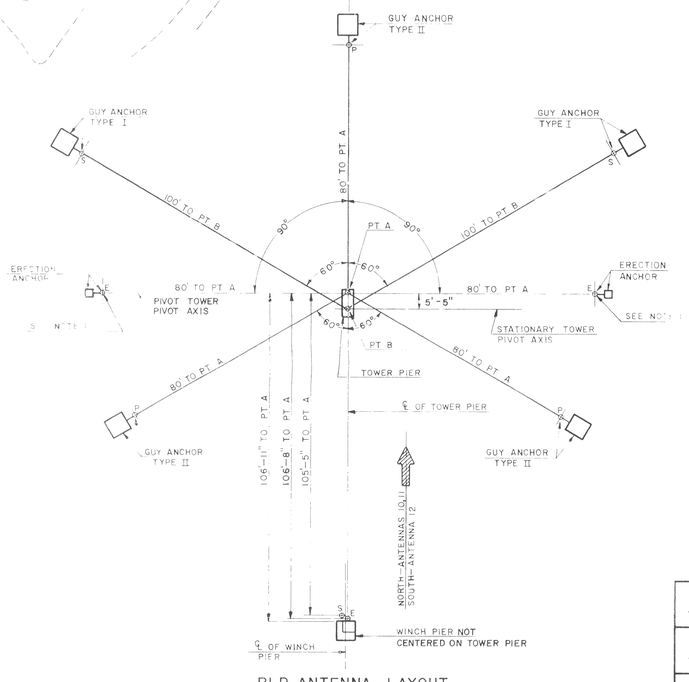


VICINITY MAP

SCALE 1" = 2 MILES

GENERAL NOTES:

1. SIDE ERECTION ANCHOR EYES SHALL BE WITHIN 1" , HORIZONTALLY AND VERTICALLY, OF THE PIVOT AXIS OF THE PIVOT TOWER.
2. ALL CONCRETE SHALL HAVE A 28 DAY COMPRESSIVE STRENGTH OF 4000 PSI.
3. REINFORCING STEEL SHALL BE DEFORMED REINFORCEMENT BARS CONFORMING TO THE REQUIREMENTS OF ASTM A 615-79 GRADE 40 BILLET STEEL.
4. ALLOWABLE TOLERANCES:
   - WINCH PIER ANCHOR BOLTS: ±⅛"
   - ANGLES: ± 1 DEGREE
   - GUY ANCHOR & WINCH PIER RADIAL DISTANCES: ±6"
   - GUY ANCHOR ROD VERTICAL ANGLE: ±5 DEGREES
   - TOWER PIER ANCHOR BOLTS: ±¼" (EXCEPT AS NOTED)
   - SIDE ERECTION ANCHOR EYES: ±1" VERTICAL & HORIZONTAL
   - TOWER PIER & WINCH PIER TO BE LEVEL: ±¼"
5. ALL ELEVATIONS SHOWN ARE WITH RESPECT TO A LOCAL DATUM TAKEN AT 1500 FT. ABOVE THE U.S.G.S. DATUM.
6. SEE SHEET 2 FOR PIER AND FOUNDATION DETAILS.



RLP ANTENNA LAYOUT

SCALE 1" = 20'

LEGEND:

E	ERECTION ANCHOR
S	STATIONARY TOWER ANCHOR
P	PIVOT TOWER ANCHOR
-o-	ANCHOR EYE (POINT OF MEASUREMENT)
PT. A	INTERSECTION OF TOWER PIER ℄ AND PIVOT TOWER PIVOT AXIS.
PT. B	INTERSECTION OF TOWER PIER ℄ AND STATIONARY TOWER PIVOT AXIS.
- - 67 - -	EXISTING CONTOUR LINE

LEGEND CONT.

—67—	FINISHED CONTOUR LINE
—W—	UNDERGROUND WATER LINE
—C—	UNDERGROUND COMMUNICATION LINE
E.F.	EACH FACE
E.W.	EACH WAY
G.F.M.	GOVERNMENT FURNISHED MATERIAL
C.C.	CENTER TO CENTER
73.5	FINISHED GRADE ELEVATION

COORDINATION

OFFICE	SYMB	REV	DATE	DESCRIPTION	DRAWN	APPRD
	416 BMW/SE					
	416 CSG/SP					
	416 CSG/DEF					
USAF HOSP/SGPB	416 CSG/DEEC					
	416 CSG/DEM					

STRATEGIC AIR COMMAND
CIVIL ENGINEERING

SCHEME SUPPORT—AVA

SITE PLAN

SUBMITTED	RECOMMENDED	APPROVED
416 CSG/DEED	416 CSG/DEE	416 CSG/DE

DESIGNED	CHECKED	SCALE	DRAWING NUMBER
JMF/		AS SHOWN	TO-1751
DRAWN	DATE	PROJECT NUMBER	SHEET 1 OF 3
JMF	20SEP 85	JREZ 84-0160	

SAC FORM 1027A