

Environmental Impact Analysis Process



FINAL ENVIRONMENTAL ASSESSMENT
ARMED FORCES RADIO AND TELEVISION
SERVICE - BROADCAST CENTER
MOVE TO MARCH AFB, CALIFORNIA

PREPARED BY SMC/CEV FEBRUARY 1995

DEPARTMENT OF THE AIR FORCE



Report Documentation Page						
Report Date 00021995	Report Type Final	Dates Covered (from to)				
Title and Subtitle Environmental Impact Analysis Process Environmental Assessment Armed Forces Radio and Television Service - Broadcast Center		Contract Number				
		Grant Number				
		Program Element Number				
Author(s)		Project Number				
		Task Number				
		Work Unit Number				
Performing Organization Name(s) and Address(es) Department of the Air Force Space and Missile Systems Center/CEV Los Angeles AFB, CA 90245		Performing Organization Report Number				
Sponsoring/Monitoring Agency Name(s) and Address(es) sponsoring agency and address		Sponsor/Monitor's Acronym(s)				
		Sponsor/Monitor's Report Number(s)				
Distribution/Availability Sta Approved for public release, d						
Supplementary Notes The original document contain	ns color images.					
Abstract						
Subject Terms						
Report Classification unclassified		Classification of this page unclassified				
Classification of Abstract unclassified		Limitation of Abstract UU				
Number of Pages 23		- '				

DRAFT ENVIRONMENTAL ASSESSMENT

Proposed Relocation of the Armed Forces Radio and Television Service (AFRTS) Broadcast Center to March Air Force Base, California

TABLE OF CONTENTS

1.0	OBJECTIVE, PURPOSE AND NEED
2.0	DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES4
3.0	ANTICIPATED ENVIRONMENTAL ISSUES11
4.0	ENVIRONMENTAL CONSEQUENCES
5.0	AIR CONFORMITY ANALYSIS
6.0	REFERENCES16
7.0	PERSONS CONTACTED17
8.0	LIST OF PREPARERS17
APPE	NDIX 1. AIR PERMITS19
APPE	NDIX 2. AIR CONFORMITY CALCULATIONS20
LIST	OF FIGURES
Figure Figure Figure Figure Figure Figure Figure	2 1. Outside of existing Sun Valley Facility. 2 2 2. Outside of new March AFB Facility, Building 2730. 3 3 3. March AFB in vicinity of Building 2730. 6 4 4. Plot plan for proposed facility 7 5 5. Existing antennas at Sun Valley facility. 8 6 6. Large generator to be moved to March AFB 9 6 7. Small generator to be moved to March AFB 10 6 8. Fuel tank to be moved to March AFB 11 6 9. Burrowing Owl 12 OF TABLES
	 Designations and thresholds for criteria pollutants for March AFB15 Emissions Estimates (tons/Year)16

1.0 Objective, Purpose and Need

The Armed Forces Radio and Television Service (AFRTS) is the principal operating element of the American Forces Information Service (AFIS), a DoD field activity under the direction of the Assistant to the Secretary of Defense for Public Affairs. The AFRTS mission is to provide radio and television news, sports, religious, information and entertainment programming to 1 million DoD personnel and their families stationed overseas or at sea where English language broadcast service is unavailable or inadequate. From the days of isolated radio stations in World War II, AFRTS has grown to a worldwide, state-of-the-art network, continuing to provide a "touch of home" to U.S. service members with the goal of disseminating essential, time-sensitive DoD command information material, essential to maintaining military morale and readiness.

All programming is negotiated for, procured, and distributed by the AFRTS Broadcast Center (AFRTS-BC), which provides a balanced selection of top-rated commercial U.S. radio and television programs. AFRTS-BC is a 24-hour operation that uses ten satellites to provide continuous service to over 450 outlets in more than 140 foreign countries and U.S. territories. Over 300 U.S. Navy ships at sea also receive AFRTS programming.

In 1986, AFRTS-BC moved into an existing 68,000 square foot facility in Sun Valley, California. Prior to moving to Sun Valley, AFRTS-BC operations were conducted from leased facilities in Hollywood, California, where it had been since 1948.



Figure 1. Outside of existing Sun Valley facility.

It was recently learned from engineering studies that the Sun Valley AFRTS-BC building requires the complete replacement of its heating, ventilating and air conditioning (HVAC) system at a cost of \$3.4 million. The proper functioning of the HVAC system is critical

because if it fails, the equipment required to distribute the AFRTS radio and TV programs around the world by satellite would also shut down, leaving service members and their families stationed overseas without service. In addition, the Sun Valley facility is bound on all sides by adjacent civilian buildings prohibiting the addition of any other antennas needed for future services.

By 1997, AFRTS-BC will implement three additional television channels and several additional radio services for distribution by satellite overseas. This increase in service is possible through the use of digital compression at no additional satellite cost. The new channels will permit AFRTS-BC, in addition to significantly increasing its service, to send a complete program day to both the Atlantic and Pacific theaters, thus eliminating the need for manpower to play back recorded programming at each individual station. Remaining at Sun Valley would require AFRTS-BC to renovate 10,000 square feet of warehouse space within the building to accommodate the added equipment before the new services can be inaugurated. The cost for the modifications is estimated at \$200,000.

The Air Force recently completed a \$22 million, 119,000 square foot technical facility at March Air Force Base, California, to house the Headquarters, Air Combat Camera Service, the 2d Combat Camera Squadron, and the Air Force Media Center (during initial facility siting and design, these occupants were referred to collectively as the Aerospace Audiovisual Service (AAVS).) The new facility was designed as a "high tech" television and audiovisual production facility that includes state-of-the-art TV operating areas, editing rooms, sound mixing rooms, vast video duplication facilities, and environmentally controlled archival areas. The entire building has a modern HVAC system specifically designed for delicate electronic equipment. Most of the facility is equipped with computer flooring to permit the efficient routing of cabling.



Figure 2. Outside of new "high tech" March AFB facility, Building 2730.

At about the same time the new facility was nearing completion, the Air Force Chief of Staff decided to realign the 2d Combat Camera Squadron under the 615th Air Mobility Group and transfer its operation to Travis Air Force Base, California, by the end of 1995; eliminate both the Air Combat Camera Service and the Air Force Media Center, effective 30 Sep 94;

and proposed the transfer of the Motion Media Records Center (MMRC) portion of the Air Force Media Center to AFIS, who concurred with the transfer, effective 1 Oct 94. The MMRC is involved in library, archival, and retrieval services for motion media products. The MMRC is housed in the new March AFB facility but occupies only approximately 38,000 square feet of the 119,000 square feet available.

The Air Force decided to move its Audit Agency, the Western Region of their Recruiting Service, and their Office of Special Investigation into the remaining space. These three organizations are currently housed in an adjacent 2-year-old building that was specifically designed for office space. In order to move the three administrative organizations into the new facility, between \$850,000 and \$1 million in renovation would have to be done on the new facility. Most of this renovation would turn expensive, specially designed technical spaces into areas suitable for administrative offices, thus wasting much of the substantial funding required to build this "high tech" facility.

AFIS contacted the Air Force and suggested that relocating the AFRTS-BC from a restricted and sub-standard facility requiring excessive repairs at Sun Valley to a "high tech" building at March AFB should meet AFRTS needs for the next 20 years. AFRTS could move its Broadcast Center into the new March AFB building with little or no modification and make full use of all of the unique technical features the new facility provides, including the installed equipment. At March AFB, there is more than enough space for the satellite antennas with additional space for future expansion. The Air Force would avoid the \$3.4 million cost for the HVAC at Sun Valley; the \$850 thousand to \$1 million to modify the "high tech" facility to administrative space; and AFIS would save the \$200 thousand required to modify the Sun Valley facility to accommodate the new AFRTS digital compression services. In addition, the Federal Government can sell the building being vacated at Sun Valley, realizing even more savings for the Federal Government.

The Air Force and the Assistant Secretary of Defense (Economic Security) agreed that it made good business sense to use the new March AFB facility for its intended purpose. Additionally, the March AFB Joint Powers Authority approved a resolution on 7 Dec 94, endorsing the proposed relocation to March AFB. Relocating AFRTS-BC to March AFB matches a "high tech" broadcast and audiovisual operation with an existing "high tech" facility specifically designed for this type of operation. The DoD believes this is the best use of DoD resources and taxpayer's dollars.

2.0 Description of Proposed Action and Alternatives

The proposed action is to relocate the AFRTS Broadcast Center operation at Sun Valley to March AFB. Personnel and selected equipment would be relocated to March AFB in a phased action beginning in Mar 95 and concluding in Sep 95. The proposed action would affect 189 military, civilian, and contractor personnel. AFIS estimates that 75 percent of civilian and contractor personnel would choose to relocate. The remainder would either choose retirement or serverance. Some of the open positions that would become available could be filled by the existing work force in the March AFB area. All personnel and equipment would be accommodated in the existing facility at March AFB. No building renovations would be necessary, but minor site modifications would be required to accommodate the transfer and installation of the existing AFRTS-BC satellite antenna farm and backup power generator

systems.

2.1 Alternatives Considered and Eliminated from Consideration

The one alternative considered would be to renovate the AFRTS-BC Sun Valley building at the expense of investing over \$3.6 million into a 28-year-old facility. This would not be cost effective in context with the long-term AFRTS mission and the availability of the newly constructed \$22 million facility at March AFB, and was eliminated from consideration as an alternative.

2.2 No Action Alternative

The no-action alternative calls for operating the current AFRTS-BC mission from an aging facility that poses serious questions for sustaining the AFRTS worldwide mission. The current air conditioning system could fail anytime, resulting in the discontinuation of AFRTS broadcast services. A no-action alternative would leave the AFRTS-BC operation highly vulnerable to mission failure.

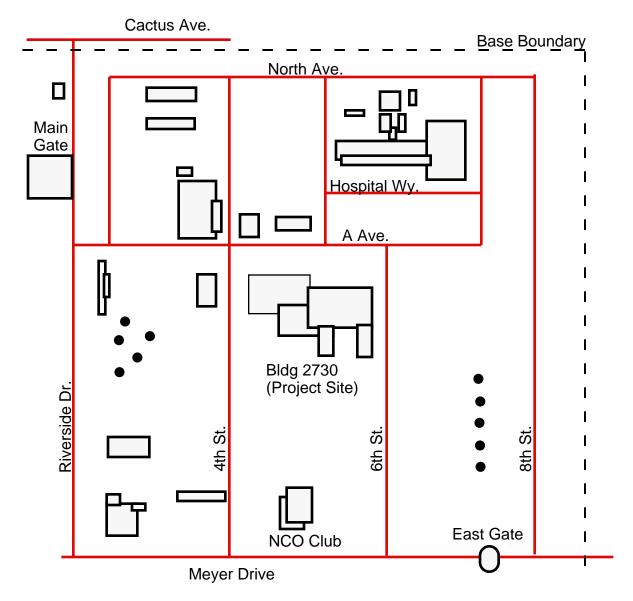
2.3 Description of the Decision That Must be Made and Identification of the Decision Maker

The decision that must be made is what action to take to maintain critical AFRTS broadcast services to provide uninterrupted support to the worldwide AFRTS audience, while providing the capability to expand broadcast services in the near future. This decision will be based on the capability of each alternative to meet the minimum mission requirements, while considering the level of potential environmental impacts of each alternative.

2.4 Location of Proposed Action

Covering nearly 7,000 acres of Riverside County in southern California, March AFB is located approximately 50 miles southeast of Los Angeles. The base is bordered by the cities of Moreno Valley, Perris, and Riverside and by unincorporated land under the jurisdiction of Riverside County.

The base is bisected by interstate Highway 215 (I-215). The Main Base is the area to the east of the interstate, whereas the area west of I-215 is appropriately referred to as West March. The Main Base contains the flight line and related facilities; the cantonment area which includes administrative and operational support facilities; the unaccompanied and family housing areas; the morale, welfare, and recreation facilities; the hospital; and the proposed AFRTS-BC facility (Building 2730). Figure 3 depicts the major features of the base near the facility.



Burrowing Owl Nest Box Sites

Figure 3. March AFB in vicinity of Building 2730.

2.5 Facilities

The AFRTS-BC operation will occupy 81,000 square feet in Building 2730, located at 1363 Z Street on March AFB. The remainder of this 119,000 square foot facility (38,000 square feet) is currently occupied by 53 DoD civilian and contractor personnel assigned to the Defense Visual Information Center (DVIC), whose mission is to manage the DoD Motion Media Records Center for AFIS. The addition of AFRTS-BC personnel and equipment will make full use of the unused portion of the facility with minimal modification to the building's functional layout. Minor exterior site modifications will be required in the area immediately adjacent to the west side of the building (and east of 4th Street) to install AFRTS-BC satellite antennas and backup generator systems. Figure 2.2 depicts the proposed site plan for these systems.

2.5.1 Satellite Antenna Farm

The AFRTS-BC mission requires the use of an assortment of nine satellite antennas to receive and transmit radio and television programming to the worldwide AFRTS audience. Seven of the antennas are "receive-only" and do not emit any radio frequency (RF) radiation. Only two antennas will be used in a transmission mode, and they comply with mandatory Federal Communications Commission (FCC) environmental and safety guidelines for RF radiation hazards. Each antenna will require standard 3,000 psi concrete foundations be poured to support the antenna hardware. Foundations will be added without altering the building's landscaping scheme or support structures (driveways, sidewalks, parking lots, curbs, etc.) Each antenna position is referenced in Figure 4 with the function is specified below:

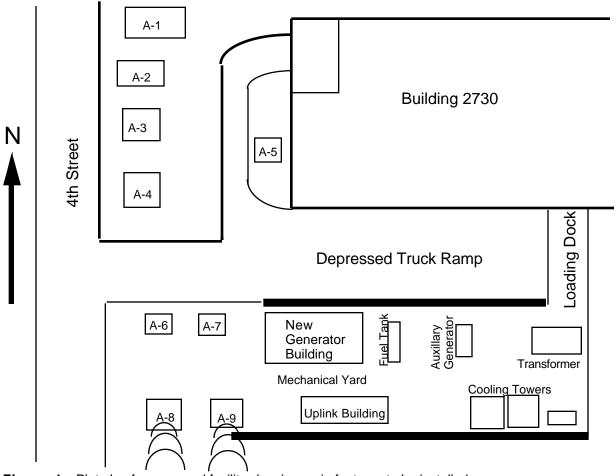


Figure 4. Plot plan for proposed facility showing main features to be installed.

- A-1. 7-meter Simulsat Antenna: Receive-only on 60 x 40-foot foundation.
- A-2. 5-meter Simulsat Antenna: Receive-only on 50 x 25-foot foundation.
- A-3. 7-meter Agile Antenna: Receive-only (C-Band) on 40 x 40-foot foundation.

- A-4 7-meter Agile Antenna: Receive-only (Ku-Band) on 40 x 40-foot foundation.
- A-5 4.5-meter AFDAS Antenna: Receive-only on 20 x 20-foot foundation.
- A-6 4.5-meter Antenna: Receive-only on 20 x 20-foot foundation.
- A-7 4.5-meter Antenna: Receive-only on 20 x 20-foot foundation.
- A-8 6.1-meter Uplink/Downlink Antenna: Primary receive; backup transmission. Mounted on 30 x 30-foot foundation. When configured in the transmission mode, it meets the same FCC standard as the primary uplink antenna.
- A-9 6.1-meter USEI Uplink Antenna: Primary transmission antenna on 35 x 25-foot on foundation.



Figure 5. Existing emitting antenna (foreground) and receiving antennas at Sun Valley facility.

2.5.1.1 USEI Uplink Building. A small uplink support building will be moved from Sun Valley to March AFB to support the antenna's transmission equipment and a maintenance work area, in addition to providing an office area for USEI contractor personnel. The building will be located next to the primary 7-meter uplink antenna, mounted on a 48 x 12.5-foot concrete foundation within Building 2730's mechanical equipment yard.

2.5.2 Backup Generator Systems The 24-hour a day AFRTS-BC operation demands emergency backup power in the event of a main facility power outage.

Main Generator. A 940 KW main generator is required to provide emergency backup power to the broadcast operations.

<u>Equipment Description:</u> Internal combustion engine, GM/Detroit diesel, diesel-fueled, emergency electrical generation, Model No. 8-645E4B, turbocharged, after cooled, 8 cylinders, 1,200 BHP. This equipment generates 480 volt (60 Hz) 1,600 ampere service, and shall not be operated more than 200 hours in any one year.



Figure 6. 1,200 BHP generator to be moved to March AFB outside of Building 2370

This generator will be moved to the AFRTS-BC facility at March AFB from its current location at Sun Valley, and positioned in the facility's mechanical equipment yard on a 45.3 x 25-foot foundation (housed within a protective structure), immediately south of the depressed truck ramp and loading dock on the southeast corner of Building 2730 (Figure 4) in a new building.

Currently, the equipment is certified by the South Coast Air Quality Management District (AQMD) for operation in Sun Valley (Permit No. D59820 A/N 270889). The permit process has been initiated to transfer the AQMD authorization for operation at March AFB.

Auxiliary Generator. A 200 KW auxiliary generator is required to provide backup power to the facility's critical uninterruptable power supply (UPS).

Equipment Description: Internal combustion engine, Cummins, diesel-fueled, emergency electrical generation, Model No. NT855-G4, turbocharged, after cooled, 6 cylinders, 375 BHP. This equipment will not be operated more than 200 hours in any one year.

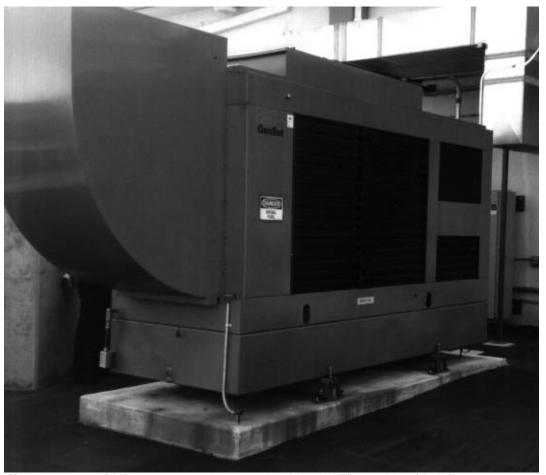


Figure 7. 375 BHP generator to be moved to March AFB outside of Building 2370

This generator will be moved to the AFRTS-BC facility at March AFB from its current location at Sun Valley, and positioned in the facility's mechanical equipment yard on a 13 x 5.1-foot foundation.

Currently, the equipment is certified by the South Coast AQMD for operation in Sun Valley (Permit No. D59821 A/N 270890). The permit process has been initiated to transfer the AQMD authorization for operation at March AFB.

Fuel Tank. A 2,000 gallon diesel fuel tank (above ground) will be relocated from the AFRTS-BC facility at Sun Valley to the new facility at March AFB. This equipment will be located in the facility's mechanical equipment yard on a 20.2 x 9-foot concrete foundation. It supplies fuel to both the Main Generator and Auxiliary Generator.

Equipment Description: Sanpoli Petrovault 2,000 gallon diesel, vented with dual-wall alarmed rupture tank. Currently, the equipment is certified by the South Coast AQMD for operation in Sun Valley (same permit as the Main Generator). The permit process has been initiated to transfer the AQMD authorization for operation at March AFB.



Figure 8. Fuel tank to be moved to March AFB outside of Building 2370. The building behind the tank houses the large generator at Sun Valley. A similar building will be built at March AFB.

2.6 Fate of Sun Valley Facility

Subsequent to the proposed move to March AFB, the Sun Valley facility would become excess. The move will include removal of the emergency generators, fuel tank and antennas, so the facility remaining is the building and the property. The Army Corps of Engineers will make a determination whether any other DOD agencies require the facilities. If not, they will be turned over to GSA, who will evaluate the value of the property and then sell it.

3.0 Anticipated Environmental Issues

This Environmental Assessment (EA) is part of the Environmental Impact Analysis Process (EIAP) for the proposed project. The EIAP is set forth in Air Force Regulation (AFR) 19-2, which implements the National Environmental Policy Act (NEPA), the President's Council on Environmental Quality (CEQ) regulations, and Department of Defense (DoD) Directive 6050.1 (July 30, 1979.) This EA will identify, describe, and evaluate the potential environmental impacts of activities associated with the proposed action and other reasonable alternatives, including the no-action alternative.

For the proposed action, this EA assesses environmental impacts of transferring the AFRTS-BC operation from its facility in Sun Valley to an existing facility at March AFB that was constructed to comply with the realignment of March AFB as a result of the recommendations of the Defense Secretary's Commission on Base Realignment and Closure (BRAC), legislative requirements in the Base Closure and Realignment Act (Public Law 100-526), and U.S. Air Force plans to enhance mission readiness and national security. Environmental impacts of the March AFB facility have been previously assessed and were

specified in the *Final Environmental Impact Statement for Realignment of March Air Force Base, California (July 1991)* as part of the Air Force decision to transfer the Aerospace Audiovisual Service (AAVS) organization from Norton AFB to March AFB.

Anticipated environmental issues for the proposed action are minimal. The key potential impacts are in air quality and electromagnetic radiation (EMR). Both of these issues are addressed in section 4.0 Environmental Consequences. An analysis of EMR is given in that section, and an Air Conformity Determination is included in section 5.0. That determination indicates that the proposed project is below the deminimus threshold required for further action. Existing permits for the Standby generators are included in Appendix I.

Pollution prevention initiatives have been used by the proponent to reduce the use of hazardous waste, so there is very little hazardous waste associated with the project. Past hazardous wastes that have been eliminated consisted of floor cleaner and scale remover. The only hazardous waste still produced is from video head cleaner, S7-11 also called CFC 7-11, which is an Ozone Depleting Chemical, but for which there is still no alternative. Occasionally cans of the cleaner are clogged and must be disposed of. The total quantity bought is about 20-30 gallons per year. The AFRTS-BC commander has committed to use recycled paper to the maximum extent possible and to recycle waste paper as aggressively as possible.

This Environmental Assessment is of local interest only and no 30 day wait period is required before this action is taken.

4.0 Environmental Consequences

A description of the findings for each potentially impacted environmental area is given below.

4.1 Radio Frequency Radiation

The AFRTS-BC facility in Sun Valley currently uses a 6.0-meter antenna for transmission at a frequency of 6325 MHz. The antenna operates in a continuous wave mode at an average power of 160 watts and a gain of 50 dBi. It is capable of transmitting at up to 300 watts within a frequency range of 5925-6425 MHz. The operating frequency and power depend on its location and the location of the current satellite. As a result, these parameters may change after relocation. For an estimate of the potential health impacts from the EMR, the following power densities were tabulated assuming maximum power at 300 watts. They were derived from calculations described in the current Air Force Occupational Safety and Health Std 161-9 (AFOSH 161-9).

Hazard Distance (feet)
1604
719
509

The AFRTS-BC facility currently operates under the regulation of FCC Rule 1.307 and IEEE and ANSI Standard C95.1-1991. Their calculations use the same procedures as the Air Force in determining power densities and corresponding hazard distances. However, they include multiplication factors which create more conservative values. When the AFRTS-

BC facility operates within the above referenced documents, they are well within compliance with the standards set by the American Conference of Governmental Industrial Hygienists and the Air Force. The standard for worker exposure under ?????? is 10 mW/cm2 for this antenna. The FCC standard is 5 mW/cm2.

Relocation of the facility will cause changes in this assessment due to a change in surrounding environments (nearby structures, ground, etc...) and possible changes in the antenna's operating power. However, the above power densities are adequate in identifying potential hazards. Once installation has been completed at the March AFB facility, a full EMR (or Radiofrequency Radiation) survey will be completed as mandated by the Air Force in AFOSH 161-9.

Installation will include all applicable health and safety precautions in preventing EMR overexposures. These steps will include, but are not limited to, fences, warning signs, interlock mechanisms, lockout/tagout procedures, and means to prevent the antenna from pointing downward where people could be exposed in the beam.

People using the parking lot and entering the building and in the area will be safe from the radio frequency emissions because the antenna will be elevated, will aim high, and because there is minimal off beam emissions. The beam is essentially a colum emitting from the antenna directly to the satellite. Studies have shown that RF radiation sources do not have a significant effect on birds or terrestrial animals.

4.2 Air Quality

Building renovations and site modifications at March AFB would be minor, creating air emissions that are below the level required for Air Conformity Determination. For detailed quantified information on air quality, refer to the air conformity analysis in section 5.0. Backup generators will be moved from their current location to March AFB, both of which are in the South Coast Air Quality Management District, so there will be no net increase in emissions from the generators in the air basin, although they will be moved approximately 80 miles. The air permits for the standby generators are in appendix 1. Applications have been made to the South Coast AQMD to move the permits from the Sun Valley facility to the March AFB facility.

4.3 Hazardous Materials and Potentially Hazardous Chemicals

The Department of Toxic Substances Control has identified AFRTS-BC as a small generator hazardous waste activity and issued the current activity the following CAL EPA identification number: CAL 922944629. The use and handling of hazardous wastes will not increase as a result of the AFRTS-BC relocation to March AFB.

The program would utilize the existing pharmacy concept procedures in place at March AFB for the use and handling of hazardous materials and hazardous wastes. The maximum hazardous waste to be generated per year would be 20-30 gallons of CFC 7-11 used in video machine cleaning. As a result, there would be no significant impact on human health and safety or the environment as a result of the proposed action.

At the new March AFB site, any spills of fuel or waste oil from the generators will be

reused or recycled depending on quality. A catchment in the generator building will keep the entire oil and fuel volume in the event of a spill.

The project site was not investigated during the Installation Restoration Program. The minor construction of concrete pads will dig to approximately 6 foot depth which will not reach to the depth of ground water (approximately 50 feet).

4.4 Socioeconomics

Socioeconomic impacts are not expected to impact any environmental area, nor were any environmental justice issues identified that would result from the proposed project. There is no significant socioeconomic impact from this project.

March AFB. The relocation of 189 permanent jobs to March AFB would have a positive effect on the economy of the Riverside metropolitan area. Some positions vacated as a result of the action would be filled by existing work force in the March AFB area, also resulting in a positive effect on the economy of the area. The Riverside area has sufficient infrastructure (housing availability, schools, police, fire, and medical care) to support the additional 189 workers and their families with no significant impacts.

<u>Sun Valley.</u> The proposed action would result in the loss of 189 permanent jobs associated with the AFRTS-BC mission in Sun Valley. The operation is located in the Los Angeles area, which has a population of nearly 9 million. The transfer of these positions would have no significant impact on the size of the work force in the area.

4.5 Biological Resources.

Studies have shown that RF radiation sources do not have a significant effect on birds or terrestrial animals. Only minor site modification is planned as a result of the proposed action, associated with construction of the concrete foundations for the AFRTS-BC antenna and generator systems; hence, not significant impacts would occur to animal habitats.

Burrowing Owl Nests occur not far from the project site. (WRITE MORE)

Figure 9. Burrowing Owl

4.6 Cultural and Archaeological Resources

Only minor site modification will take place as a result of the proposed action in areas that have already been developed. Therefore, impacts to cultural and archaeological resources are not expected.

4.7 Transportation

The addition of 189 jobs to the area would only slightly add to the demands on roadways and air traffic, and would not pose a significant impact, since the proposed action would be offset by the jobs lost due Air Force force reductions at March AFB. The AFRTS-BC group now meets the 1.5 ridership requirement of the South Coast AQMD, and will also meet the same requirement at the new location.

4.8 Utilities

The water supply, gas supply, electrical supply, wastewater treatment facilities, and solid waste disposal systems of March AFB or the city of Riverside have sufficient excess capacity to handle the increases that would occur as a result of the proposed action with no adverse impact.

4.9 Noise

March AFB has an active Air Force runway where air traffic is the primary source of noise. The small increase in automobile traffic would not significantly impact existing noise levels. Because only limited site modification is anticipated as a result of the proposed action, construction noise would be minimal. The standby generators both include mufflers to reduce noise to levels consistent with their current industrial settings, that are adequate for their new location at March AFB.

4.10 Safety Considerations

The prime safety consideration is exposure to electro-magnetic radiation from the uplink antennas. Strength of emissions are calculated by SMC/SDZ, the Bioenvironmental engineering office that has responsibility for safety and industrial hygiene are included in this Environmenal Analysis in section 4.1.

4.11 Land Use

The use of this site is compatible with existing land use in the area. The primary use is office space and broadcast communication work, that the facility was built for. There are no incompatible land uses for this project at this site.

5.0 Air Conformity Analysis

- **5.1 Purpose:** The United States (US) Air Force is required to complete an air quality conformity analysis to determine whether the move of the Armed Forces Radio and Television Service Broadcast Center from its current location in Sun Valley California to a new location at March AFB, California complies with the conformity rule for implementation of the amended Clean Air Act.
- **5.2 Background:** The US Environmental Protection Agency (EPA) has issued regulations clarifying the applicability of and procedures for ensuring that Federal activities comply with the amended Clean Air Act. The EPA Final Conformity Rule, 40 CFR 93, subpart B (for Federal agencies), and 40 CFR 51, subpart W (for state requirements), implements Section 176(c) of the Clean Air Act, as amended in 42 U.S.C. Section 7506(c). This new rule was published in the Federal Register on November 30, 1993, and took effect on January 31, 1994.

The new EPA Final Conformity Rule requires all Federal agencies to ensure that any agency activity conforms with an approved or promulgated State Implementation Plan (SIP) or Federal Implementation Plan (FIP). Conformity means compliance with a SIP/FIP's purpose of attaining or maintaining the national ambient air quality standards (NAAQS).

Specifically, this means ensuring the Federal activity will not: (I) cause a new violation of the NAAQS; (2) contribute to an increase in the frequency or severity of violations of existing NAAQS; or (3) delay the timely attainment of any NAAQS, interim milestones, or other milestones to achieve attainment. NAAQS are established for six criteria pollutants: ozone (O₃), carbon monoxide (CO), particulate matter (PM_{IO}) nitrogen dioxide (NO₂), sulfur dioxide (SO₂), and lead (Pb). The current ruling applies to Federal actions in NAAQS nonattainment or maintenance areas only.

EPA's Final Conformity Rule applies immediately to all Federal agencies until the applicable state's SIP conformity requirements are approved by the EPA.

Federal actions which result in emissions under established deminimus levels are not required to demonstrate further conformity. In addition to meeting deminimis requirements, a Federal action must not be considered a regionally significant action. A Federal Action is considered regionally significant when the total emissions from the action equal or exceed 10 percent of the air quality control area's emissions inventory for any criteria pollutant. If a Federal action meets deminimis requirements and is not considered a regionally significant action, then it is exempt from further conformity determination pursuant to 40 CFR 93.153(c). Ongoing activities currently being conducted are also exempt from the rule so long as there is no increase in emissions above the de minimis levels specified in the rule.

5.3 Status: The range of the proposed action would be between Sun Valley, California and March A.F.B., California, both of which lie within the South Coast Air Basin. Air quality management for both of these areas is under the jurisdiction of the South Coast Air Quality Management District (SCAQMD). In 1991, the SCAQMD submitted an Air Quality Attainment Plan (AQAP) to the California Air Resources Board (CARB) for the purpose of presenting a comprehensive strategy to bring the district into compliance with the state ambient air quality standards. Because the CARB is still in the process of integrating Air Quality Attainment Plans (AQAPs) from various districts throughout California, there is no EPA-approved State Implementation Plan (SIP) at this time. As a result, SCAQMD is following federal implementation guidelines.

The Air Quality Conformity Rule requires that total direct and indirect emissions of six criteria pollutants, plus ozone precursors (ie. NO_X and VOC) be considered in determining conformity within areas of non-attainment. March AFB is in an area classified as nonattainment for four of the six criteria pollutants, in 1993 (CO,O₃, NO₂ and PM₁₀) (Ref. Air Mobility Command Air Emissions Survey, Vol. II, March Air Force Base, November 1993, and South Coast AQMD, January 1994). These are listed in Table 1 with their deminimis threshold levels (ref. 40CFR93.153). Since the NO_X threshold as an O₃ precursor is below that of the threshold for NO₂ as a primary criteria pollutant, we list the former, more stringent value.

Table 1: Designations and thresholds for criteria pollutants for March AFB

<u>Pollutant</u>	Degree of Attainment	<u>I hreshold (tons/year)</u>
Carbon monoxide	Nonattainment, Serious	100
Ozone	Nonattainment, Extreme	
VOC's		10

NOx 10 PM₁₀ Nonattainment, Serious 70

PROPOSED ACTION: The emissions of CO, NO_X, VOC and PM₁₀ resulting from the proposed action are summarized in Table 2. The emissions reported were calculated according to methods described in the California Environmental Quality Act Air Quality Handbook (November 1993). and/or the U.S. EPA "Compilation of Air Pollutant Emmission Factors-Volumes I and II, (AP-42). The calculations take into account the effects of moving trucks used to transport equipment (including antennae, generators, other equipment) and the effects of construction equipment used to erect the antennae and other equipment at their final destination. The calculated emissions represent a limited number of hours of usage during the moving process. The estimated number of trips for the various vehicles, as well as hot starts, cold starts and diurnal factors were considered. Details of the calculations are provided in Appendix 5.

The effects of personnel driving personal vehicles to and from work has not been included because there is no expected net gain in traffic in the district. 80% of the personnel will be relocated to the area around the new location and 20% will be hire from the local area. There is no expected increase in the number of miles driven by employees.

An emergency electrical generator (1200 BHP) is maintained at the AFRTS-BC to be used in the event of a main facility power outage. It will be moved from Sun Valley to March AFB. The generator usage will be less than or equal to 200 hours per year (Ref. SCAQMD Permit Number D59820 A/N 270889 for current operation at Sun Valley) including both routine maintenance runs and emergency usage. A second smaller back-up generator is maintained at the facility, to be used only in the event that the main back-up generator fails (Ref. SCAQMD Permit Number D59820 A/N 270890). Since the two generators would never run simultaneously, we use the worst-case ,200 hours of full capacity output from the 1200 hp generator for this analysis. A portion of this total may be exempt from the conformity rule as it is generated in emergency situations only. An underground fuel storage tank is also exempt as a stationary source of air pollutants because its sole purpose is to provide fuel to the emergency generators. The usage of the generator will be a continuation of existing usage in Sun Valley, hence no increase in operational emissions are expected after the move.

Table 2: Emissions Estimates (tons/year)

Source Facility Relocation	so _x	Pb	PM ₁₀	CO	NOx	VOCs
flatbed trucks		2.2 x 10 ⁻⁴	1.1 x 10 ⁻¹	2.13	1.27	1.6 x 10 ⁻¹
18 wheelers	1.1 x 10 ⁻⁴	4.0 x 10 ⁻⁷	2.1 x 10 ⁻⁴	3.9 x 10 ⁻³	2.3 x 10 ⁻³	3.0 x 10 ⁻⁴
equip. moving van		4.0 x 10 ⁻⁶	2.1 x 10 ⁻³	3.9 x 10 ⁻²	2.3 x 10 ⁻²	3.0 x 10 ⁻³
concrete truck	7.9 x 10 ⁻⁵	2.7 x 10 ⁻⁷	1.4 x 10 ⁻⁴	5.3 x 10 ⁻³	1.7 x 10 ⁻³	5.2 x 10 ⁻⁴

dump truck	na	na	na	3.5 x 10 ⁻²	1.4 x 10 ⁻²	2.9 x 10 ⁻³
backhoe	2.0 x 10 ⁻⁴	na	2.4 x 10 ⁻⁴	1.6 x 10 ⁻³	2.3 x 10 ⁻³	3.3 x 10 ⁻⁴
crane	1.3 x 10 ⁻³	na	1.2 x 10 ⁻²	3.2 x 10 ⁻²	1.4 x 10 ⁻²	1.8 x 10 ⁻³
Total Mov	6.7 x 10 ⁻¹	na	1.3 x 10 ⁻	2.25	1.3	1.7 x 10 ⁻¹
Facility						
	1.8 x 10 ¹	na	2.0 x 10 ⁻¹	9.8 x 10 ⁻¹	1.56	2.4 x 10 ⁻¹
Generator	_		_	_		
	2.5 x 10 ⁻¹	na	3.3 x 10 ⁻¹	3.2 x10 ⁻¹	2.9	4.1×10^{-1}
Facility						

5.5 Analysis: The total direct and indirect emissions from the Proposed Action do not exceed the de minimis thresholds for the criteria nonattainment pollutants and presursors, and therefore, no further conformity determination is necessary. Also, since the emissions from the Proposed Action do not exceed 10% of the SQAQMD's total emissions inventory they are not regionally significant. Therefore the Proposed Action is exempted from the conformity requirements of the EPA Conformity Rule 40 CFR part 93.153 (b) and (c), in accordance with Section 176(c) of the Clean Air Act, as amended in 1990, 42 U.S.C. Section 7506(c).

6.0 References

- 6.1 Environmental Impact Statement for Realignment of March AFB, CA 7/91
- 6.2 March AFB IRP, 1987b, Phase II Confirmation/Quantification Stage I, MAFB, Volume 1.
- 6.3 Air Mobility Command Air Emissions Survey, Volume II March Air Force Base (Draft) November 1993
- 6.4 Management Action Plan March Air Force Base, Mareno Valley, California. 31 December 1993 (Pg. 3-23)
- 6.5 ANSI C95.3-1991. Effects of electromagnetic radiation on biological organisms. (CHECK REFERENCE WITH BRUCE).

7.0 Persons Contacted

Jeff White, Lt Col USAF (DOPAA) Vice Commander AFRTS-BC/CCV 10888 La Tuna Canyon Road Sun Valley CA 91352-2098 (818) 504-1401

Bruce Ziemienski (Engineering Data) Director Engineering/Ops AFRTS-BC/DOE 10888 La Tuna Canyon Road Sun Valley CA 91352-2098 (818) 504-1327

Robert Matheson Chief of Television Programming AFRTS-BC/DOPT 10888 La Tuna Canyon Road Sun Valley CA 91352-2098 (818) 504-1401

Dov Hack, Electrical Engineer AFRTS-BC/DOEE 10888 La Tuna Canyon Road Sun Valley CA 91352-2098 (818) 504-1327

Lawrence J. Watson, Ph.D. Chief, Environmental Management Division 722-SPTG/CEV Building 1213 March AFB, CA (909) 655-4858

Matt Beniveena, Lt USAF (Air Data) 722-SPTG/CEV Building 1213 March AFB, CA (909) 655-5062

8.0 List of Preparers

John Abraham Environmental Engineer (Project Manager) SMC/CEV 2420 Vela Way, Suite 1467 Los Angeles AFB, CA 90245-4659

(310) 363-1522

Dr. Valerie Lang Environmental Programs (Air Conformity Determination) The Aerospace Corporation P.O. Box 92957 Los Angeles, CA 90009 (310) 336-1170

Steve Van Middlesworth (Air Conformity Determination) Environmental Engineer SMC/CEV 2420 Vela Way, Suite 1467 Los Angeles AFB, CA 90245-4659 (310) 363-1541

Lt. Kerry Lewis (EMR Analysis) Bioenvironmental Engineer SMC/SDZ 2435 Vela Way, Suite 2218 Los Angeles AFB, CA 90245-4659 (310) 363-6204

John Edwards (Review) Chief Environmental Management Division SMC/CEV 2420 Vela Way, Suite 1467 Los Angeles AFB, CA 90245-4659 (310) 363-6200

Appendix 1

Permit To Construct/Operate 1200 BHP Generator

Permit To Construct/Operate 375 BHP Generator

Appendix 2

Air Conformity Analysis Tables