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USACE, Institute for Water Resources  
ATTN: Mark Dunning-CEWRC-IWR-A  
Ft. Belvoir, VA 22060-5586

**Development of a Noise Management Program  
For HQ, U.S. Army Europe**

**"Strawman Report"**

**Development of a Noise Management Program for  
Headquarters, U.S. Army Europe**

**STRAWMAN REPORT**

**Prepared by**

**C. Mark Dunning, Ph.D.**

**and**

**Darrell G. Nolton**

**Institute for Water Resources**

**Casey Building**

**Ft. Belvoir, VA 22060**

**Prepared for**

**Headquarters, U.S. Army Europe**

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# Chapter 1

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## Introduction

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*Noise problems have definitely impacted on our ability to train. We're at the point now that any further limitations on our training will seriously affect mission capability -- particularly in the area of night flying.*

**Airfield Manager**

*Noise is probably my biggest worry; a great deal of my time is spent dealing with noise complaints.*

**Military Community Deputy Commander**

### **Background**

The U.S. Army Europe (USAREUR) has the mission of defending Western Europe. As the quotes above suggest, however, the ability to perform this mission is at risk because of pressures on the Army to be quiet. The noise the Army makes as it trains has generated substantial controversy with neighboring German populations. In some cases pressure mobilized by those who object to the Army's noise or who use noise as a way of pursuing other agendas has begun to limit the Army's ability to train to the level necessary to maintain its mission capability.

Headquarters, USAREUR has recognized the potential threat that noise controversy poses, and is seeking ways to manage noise issues to keep them from generating the pressures that imperil operational and mission capability. The Institute for Water Resources (IWR), a research agency of the Army Corps of Engineers with significant expertise in noise management planning was selected to assist in developing a noise management program for USAREUR. A noise management program (NMP) is an institutional framework of policy, roles and responsibilities guiding the application of techniques and procedures to achieve specified goals for reducing noise controversy. A NMP stands in contrast to ad hoc, piecemeal efforts at dealing with noise controversy that often develop when noise becomes an issue.

### **Purpose**

This strawman report presents IWR's recommendations for a NMP. As a strawman, the report is meant to serve as a vehicle to enable further clarification and specification of the NMP to emerge among key USAREUR leadership.

Recommendations have been derived from a research process which was targeted at finding answers to three key sets of questions. These questions, and the reasons for their importance in developing recommendations are presented below.

1) What are the extent and severity of noise problems being encountered by USAREUR? Why are these problems occurring; what impact on mission and operational capability are they having? What is likely to happen if nothing is done to deal with noise controversy?

This set of questions is aimed at developing a better understanding of the nature and consequences of noise problems in USAREUR. Their importance is, of course, based on the assumption that a NMP should be targeted to address major problems; and that a good understanding of the causes and contributing factors of problems is requisite to developing sound ways of dealing with them.

2) What are USAREUR's expectations about what a noise management program should and should not do?

This concern is based on the assumption that a NMP should integrate into and be consistent with the organizational culture of USAREUR.

3) What techniques and principles for managing noise controversy are in use in other noise management programs? What has been learned about applying them?

The essential assumption was that the USAREUR program should be informed by state-of-the-art techniques, and should profit from the "lessons learned" in other programs.

## **Methodology**

To answer these questions IWR performed the following activities:

- Interviewed noise management experts and others knowledgeable about noise issues in USAREUR
- Examined a variety of studies on noise controversy in Germany
- Formed a technical advisory committee composed of senior leaders within HQ, USAREUR to provide information and guidance on noise and noise policy issues
- Engaged in fact finding. An extensive data collection effort aimed at identifying the scope of noise problems at the field level was undertaken. Researchers visited 33 MILCOMs and personally interviewed key personnel about noise problems, their impact on operations, and about current noise management approaches in use. In addition, recommendations and suggestions about what a USAREUR noise management program should and should not contain were obtained.

During these visits, ratings of the risk to military activities posed by noise and other environmental issues such as air and water pollution were compiled. The averaged ratings are used in this report to provide a rough measure of the severity and extent of noise and other environmental problems facing MILCOMs. These risk assessments were completed in 27 of the communities.

- Documented noise management strategies in use in the United States. To ensure that comprehensive, state of the art approaches for managing noise issues were considered in the development of the USAREUR NMP, a study of noise management strategies was performed (Planning and Management, Ltd., 1988). This study identifies common management strategies for noise issues; identifies and evaluates the effectiveness of specific management measures and techniques; and identifies lessons learned from the application of noise management experiences in the United States.
- Documented the noise situation in Germany. A report was prepared which presents data and information about the noise burden in Germany; the impacts and effects of noise from various sources; current operative guidelines, standards, and regulations for managing noise; and common noise abatement techniques now employed in Germany (Buchta, 1988 a).

### **Structure of the Report**

The information derived from the activities described in the preceding section is presented in Chapters 1 through 4 of this report. These chapters essentially constitute the "answers" to the research questions previously identified, and form the conceptual and factual building blocks for presenting the recommendations for the USAREUR NMP presented in Chapters 5 and 6.

Chapter 1 describes the activities that were undertaken to develop the recommendations for the USAREUR NMP. It also presents some general concepts about noise controversy that are helpful in understanding how noise management programs can be structured. Chapter 2 describes the noise management problems being encountered within USAREUR. The primary source of this information has come from extensive data collection visits to 33 MILCOMs. This chapter identifies those problems that a NMP should confront. Chapter 3 discusses noise management principles that have proven to be effective in other NMPs in use in the United States and elsewhere. This chapter also discusses German noise management approaches. Chapter 4 focuses on USAREUR design criteria. These expectations for a NMP are based on discussions with the TAC, and on the recommendations and suggestions made by personnel interviewed during the MILCOM visits. Chapter 5 then presents the recommendations for the USAREUR NMP. Recommendations are presented in a fairly specific format, and are annotated to provide additional explanation. Chapter 6 discusses the sequencing of a NMP.

### **General Concepts In Noise Controversy and Noise Management**

Before turning to the specifics of the USAREUR noise situation and the recommendations for a NMP, several general concepts about noise and noise controversy need to be introduced. Human response to noise is a complex, multi-faceted phenomenon. This complexity provides the possibility for addressing noise problems in a variety of ways.

Noise is sound that annoys or which poses a threat to human well-being. People become annoyed with sounds when they interfere with some valued activity such as sleep, conversation, recreation or concentration (U.S. Department of Housing and Urban Development, 1985:1). Noise of sufficient magnitude can produce hearing impairment; it has also been

linked to stress-related conditions (e.g. high blood pressure) as a by-product of the annoyance it creates (U.S. Department of the Army, 1978:1-2).

Annoyance is generally seen to be a function of several factors including:

- the loudness of the sound -- in general the louder the sound the greater the annoyance; however, loudness is only one aspect of annoyance, and not necessarily the most important factor contributing to annoyance.
- the tonal quality of the sound (some frequencies and sounds are more irritating than others)
- "appropriateness" of the sound given the time of day, significance of day or event. For example, most people find the sound of a lawn mower "appropriate" on a Saturday afternoon; however, the same sound would be "inappropriate" on a Sunday night, and would be the cause of annoyance.

Appropriateness also has a cultural component. For example, most Americans define the sound of a lawn mower as "appropriate" for Sunday afternoons, while many Germans do not.

When people become annoyed by noise, they sometimes complain. Complaints are the vehicles for exerting pressure on the noise maker to reduce the sound. Not everyone who is annoyed by noise complains, however. Complaint behavior appears to be a complex social psychological phenomena which is associated with some of the following factors (Fields and Hall, 1987):

- annoyance with the sound being made
- general orientation to and acceptance of the noise maker. The more well-liked the noise maker is, the less likely that complaints will be made or will be escalated into the political realm.
- personal efficacy - the belief in one's ability to produce an effect. This is likely to be a function of a number of variables including:
  - socioeconomic status - higher status persons are more likely to complain than lower status persons; they are used to being accorded deference and making the system work in their favor, they are used to being listened to.
  - self esteem - individuals having higher self esteem are likely to be more likely to make complaints, again because of a direct link to a belief in one's own significance and capability to influence outcomes.

The important point to note in this discussion of noise controversy is that it is more complex than the amount of noise being made. While on the one hand this complexity is a cause for dismay, it is also a cause for hope. There are many potential aspects of a noise situation that are available for management:

- loudness of sound being made

- tonal quality of sound
- "appropriateness" of sound (times of day that sound is made, etc.)
- general orientation to the noise maker
- procedural and/or self esteem satisfaction

The multi-faceted nature of noise controversy creates opportunities for a variety of approaches for dealing with particular noise problems. The intelligent choice and integration of these carefully chosen ways of reducing annoyance and propensity to complain constitute a noise management program.

### **Summary**

This chapter has identified the key tasks that have guided the research to develop recommendations for a USAREUR NMP. It has noted the complex, multi-faceted nature of noise controversy. This complexity enables a variety of approaches to be used to manage noise issues. In order to select the most appropriate approaches, however, it is necessary that there be a good understanding of the noise problems and their contributing factors. The following chapter considers these topics in some detail.

## Chapter 2

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### Noise Management Problems in USAREUR

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#### Noise and Noise Management Concerns In Germany

Germany is one of the most densely populated countries in the world with an average population density of some 639 persons per square mile (Espershade and Morrison, 1986). Contrast this figure to that of the State of Oregon which has about the same land area as that of Germany, but a population density of 28 persons per mile; or the United States as a whole with a population density of 62 persons per square mile.

Surveys show that a major part of the German populace perceive noise as a leading factor when asked about personal dismay and annoyance caused by environmental pollution (Buchta, 1988). Road traffic noise is recognized as the worst offender with more than 50 percent of the population reporting annoyance. Air traffic in general was rated second as a source of annoyance, followed by loud neighbors, industry, railroad traffic, and sports and recreational facilities. Figure 2-1 displays the percentages of those annoyed and those highly annoyed by noise from these sources.

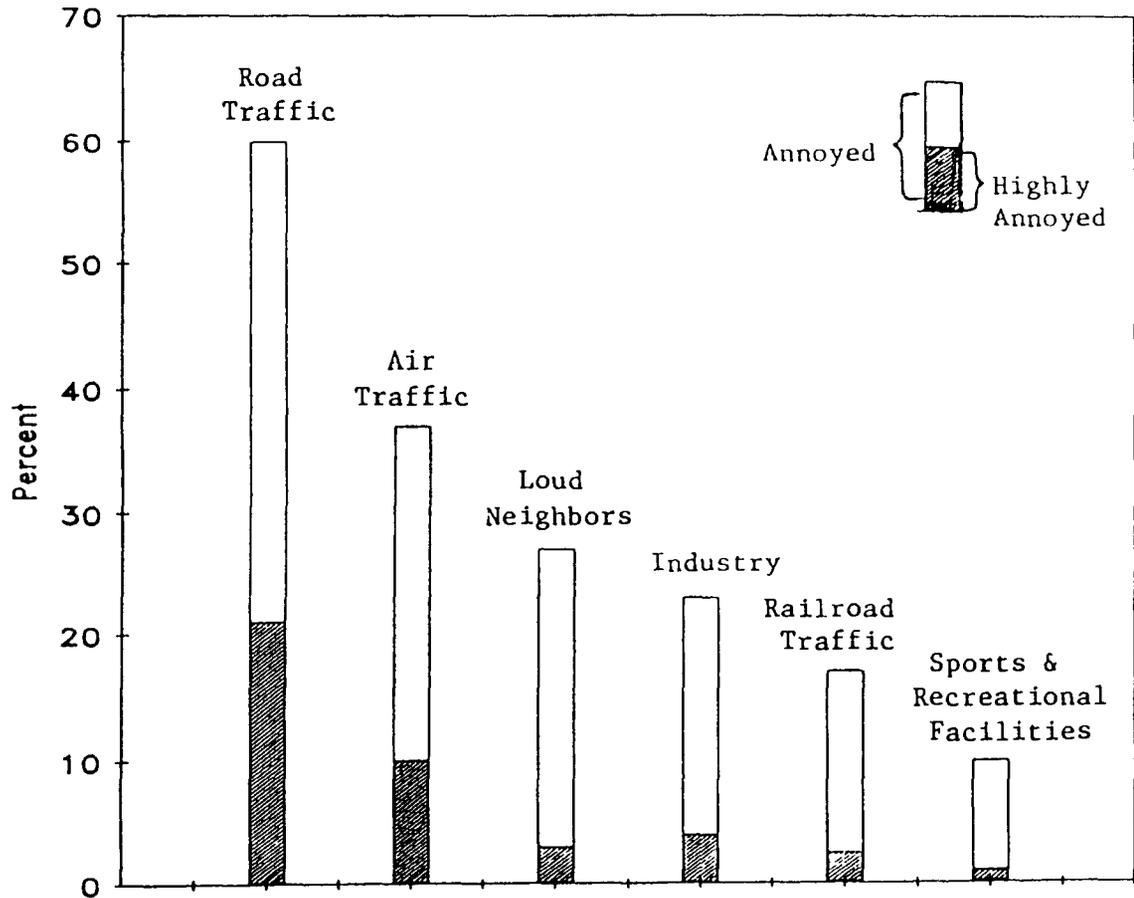
The military creates noise from artillery fire, low flying jets and helicopters, rifle fire, tank traffic and other heavy vehicle traffic travelling alone or in convoys. The military often must train at night and at other times that are normally considered quiet hours. Persons living in close proximity to military facilities in Germany report higher levels of annoyance than that produced by other noise sources (Figure 2-2).

#### Key Noise Problems In USAREUR

This section presents a summary of noise problems being experienced by USAREUR MILCOMs and tactical units, and the operational changes that have been implemented as a result of noise controversy. The problems are presented by categories of military activities as follows:

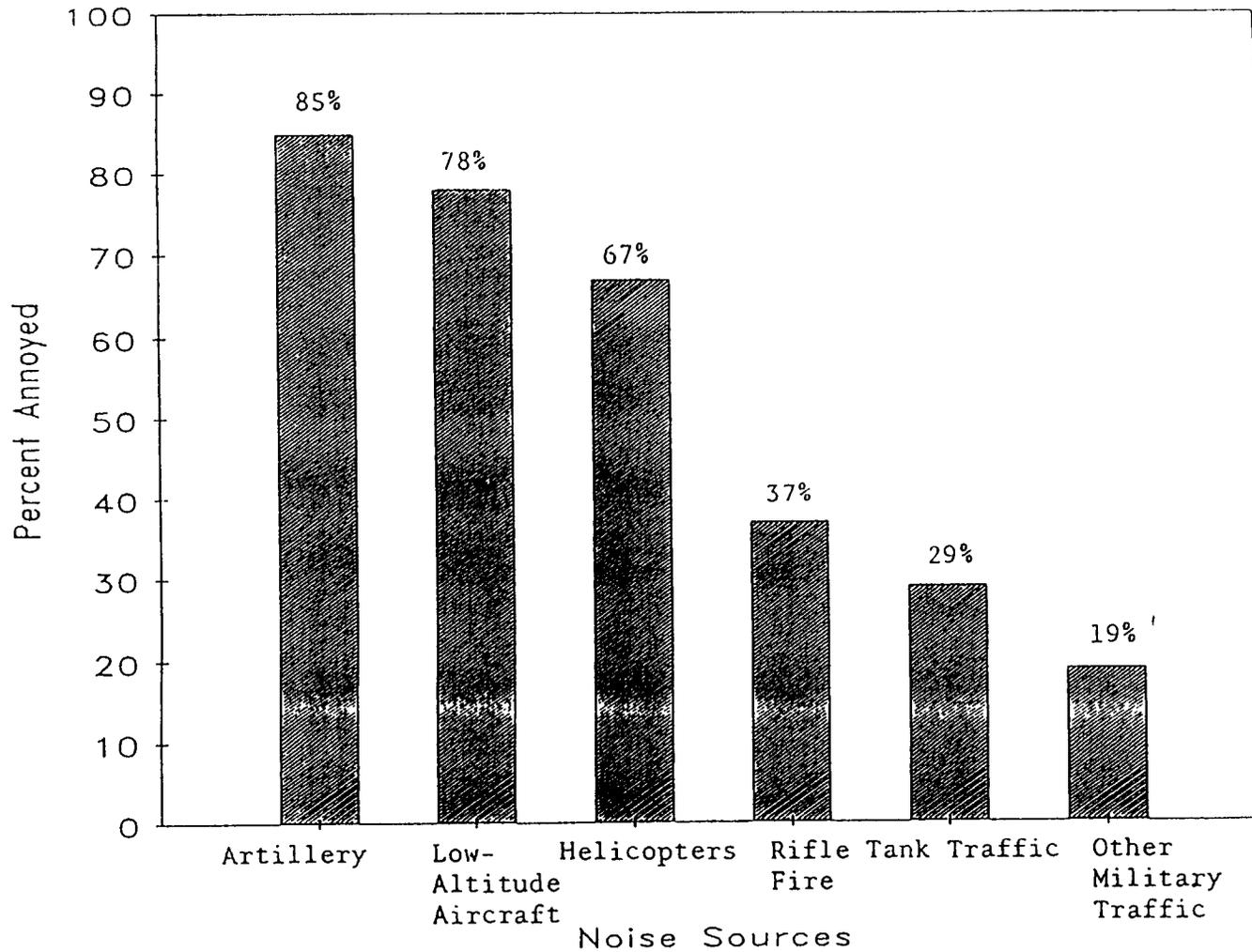
- Airfield/aircraft operations
- Local and major training areas (LTA/MTA)
- Firing ranges
- Base operations (motor pools, hospitals, kaserne)
- Convoys
- Recreational activities and housing

Information contained in this section was largely developed on the basis of personal interviews with personnel at HQ, USAREUR and Corps headquarters, and with those at MILCOMs. As noted in Chapter 1 during the MILCOM visits, key personnel were asked to complete a rating form which asked for a judgement of the risk posed by noise controversy to military activities. Risk was assessed on a 5 point scale in which a "1" represented a



Source: Federal Environmental Agency, 1987

Figure 2-1. Annoyance From Noise in the Federal Republic of Germany.



Source: adapted from Buchta et al., 1986

Figure 2-2 . Residents in the Vicinity of Military Training Areas Who Feel Annoyed by Noise

situation where noise was judged to pose no risk to the activity and a "5" represented a judgement of strong risk to being able to continue to perform the activity. A group average for each of the 27 MILCOMs completing the survey was then compiled; these figures are reported. In addition to the description of noise problems presented in this chapter, Appendix A contains tables of summaries of noise problems by MILCOM.

**Airfield/Aircraft Operations.** Seventy-seven (77%) percent of the MILCOMs surveyed reported problems with noise that is characterized as being at least "Moderate" (i.e. at least an average of a "4" on the risk assessment scale) (Table 2-1). The chief source of noise problems appears to be helicopter operations including hovering, taxiing, refueling, low level night flying, and flight training operations. Other noise complaints come from early morning run-ups (warming engines prior to early take-off; flights over no-fly areas; generators operating near the perimeter of the airfield; noise making activity occurring on Sundays, German holidays or during normal quiet hours; and jet aircraft (Table A-1).

Some airfields have land that is now in agricultural or industrial uses adjacent to them which forms a buffer to sound produced by normal operations. However, in some cases, this land is being developed, and these land uses are being replaced with residential land uses (e.g. at Fulda, and at Frankfurt).

Airfields have complied with USAREUR directives regarding operating hours, and generally feel that as a result of these procedures that noise complaints have been reduced. Airfields have also adopted individual measures to cope with noise complaints. There are many local standard operating procedures (SOPs) which contain restrictions on operations such as altered flight paths away from built-up areas; limited operating hours; prescribed times for performing routine maintenance; and adoption of the Army's Fly Neighborly program suggestions (approach airfield at higher altitude and make sharper descent to land). In addition to these SOPs, many airfield Commanders and PAOs expend considerable effort to establish good working relations with neighboring German communities. Many commanders have established local "informal" SOPs which respond to requests of neighboring communities to avoid cemeteries during funerals or to otherwise schedule around outdoor events. They also generally insure that when complaints are received they are investigated and responded to quickly.

Pressures to reduce air operations are relentless, and in some cases operational capabilities are being impacted by noise controversy. For example, at Darmstadt, a compass rose check point has been shut down because of noise complaints (Figure 2-3). At Zweibruecken and Frankfurt noise controversy figured into decisions to reduce operations at helipad sites. Stationing plans for additional helicopters at Wiesbaden, and also at Hanau's Budigen have been delayed or called into question because of controversy about noise. Many airfield managers feel that their ability to train effectively is being compromised because of noise controversy -- particularly their ability to obtain sufficient night flying time.

**LTA/MTA Training.** Noise associated with training at LTAs and MTAs was seen to be at least a moderate problem at 54% of the MILCOMs (Table 2-1). Most MILCOMs have at least one and frequently several LTAs which are used for certain kinds of maneuver training. Training noise comes from heavy vehicles -- particularly tracked vehicles, from generators, and from weapons firing. Many LTAs are situated in urbanized areas where training

TABLE 2-1

**Noise Problems Associated with Military Activities in USAREUR**

Organization/ Location	Airfield/ Aircraft Ops	LTA/MTA Training	Firing Range	Base Ops	Convoys	Recreation Activities	Housing
Heidelberg/2	//////////		//////////			//////////	
V Corps							
Bad Kreuznach	//////////	//////////	//////////	//////////	//////////		
Baumholder			//////////				
Darmstadt/1	//////////			//////////			
Frankfurt	XXXXXXX			//////////	//////////		
Fulda	XXXXXXX						
Giessen							
Hanau	XXXXXXX		//////////	//////////			
Mainz/1	XXXXXXX	XXXXXXX	XXXXXXX	//////////	//////////		
Wiesbaden	XXXXXXX		//////////		//////////		
Wildflecken	//////////	XXXXXXX	XXXXXXX		//////////		
VII Corps							
Ansbach/3	Missing Info.						
Aschaffenburg		//////////	//////////	//////////	//////////	//////////	
Augsburg	//////////	XXXXXXX	//////////	//////////	//////////		
Bad Toelz/1							
Bamberg	//////////	//////////	XXXXXXX		//////////	//////////	
Goepfingen	XXXXXXX	XXXXXXX	//////////	//////////	XXXXXXX		
Heilbronn	//////////		//////////				
Munich							
New Ulm	//////////	//////////	//////////	//////////	//////////	//////////	
Nuernberg	//////////	//////////	//////////	//////////		//////////	
Schweinfurt	XXXXXXX	//////////	//////////		//////////		
Stuttgart	XXXXXXX	XXXXXXX	XXXXXXX	//////////	//////////		
Wuerzburg	XXXXXXX	//////////		//////////	//////////		//////////
21st Sup Com							
Kaiserslautern	XXXXXXX	//////////	XXXXXXX	XXXXXXX	//////////	XXXXXXX	
Karlsruhe/4	Missing Info.						
Mannheim/2							
Pirmasens	//////////						
Rheinberg/4	Missing Info.						
Worms							
Zweibruecken							
7th ATC							
Grafenwoehr	XXXXXXX	XXXXXXX	XXXXXXX		//////////		
Hohenfels/4	Missing Info.						

**Key:**  
 XXXXXX = Major Problems  
 ////////// = Some Problems  
 Blank = Slight or No Problems

**Notes:**  
 1. Prepared centrally in response to TWIX  
 2. IWR Assessment  
 3. Not Surveyed  
 4. EPA Not Performed



Figure 2-3. Compass Rose Check Point Closed by Noise Controversy, Darmstadt Airfield

operations carried on at night or on weekends or German holidays reach a large population. As a result complaints about training noise are prevalent -- particularly concerning training that takes place during these times.

Generally speaking, many MILCOMs limit training operations during night, or on weekends or holidays. In most cases such limitations have not been formalized, but are rather a "common sense" approach to dealing with the management of training areas (Table A-2).

Respondents noted that many noise complaints regarding LTAs can be traced to units that are new to an LTA, and which are not familiar with SOPs regulating the use of the area. Frequently, these units have commanders who are "new in country" and who have not been sensitized to noise issues. It was also pointed out that many of the noise complaints at LTAs could be avoided with more sensitivity about the placement of generators during exercises at the LTAs.

To date, personnel at MILCOMs feel that they are maintaining mission capability. However, many respondents stated that each training limitation takes its toll on mission capability. Some expressed concern that the limits on night vision goggle training for helicopters is reaching a critical stage and that it may become impossible to maintain the requisite level of capability with the equipment given training limitations.

The three MTAs of Grafenwoehr, Hohenfels, and Wildflecken are very heavily used for major training by all American units in Germany, as well as by German and other NATO forces. Training is reported to be essentially continuous. At Hohenfels over 50 battalions conduct maneuver training during a single training cycle (year). This high level of activity results in the generation of considerable noise. Weapons firing and aircraft are sources causing the greatest problems. Convoys and basic traffic noise is also troublesome. While helicopter flights are the greatest contributors to aircraft noise, high-speed aircraft used in air defence exercises cause problems in some areas.

Problems associated with MTA noise is reduced partially by the location of the MTAs in relatively remote and rural areas. Fewer people surround these MTA sites, and greater proportions have economic ties to the Army. The proximity of these sites to the border also probably contributes to the relative acceptance of the military and its noise making by the local populations. The troublesome cases appear to result from special circumstances. For example, at Wildflecken the difficulties encountered in attempting to build Range 10 are primarily the result of some special interests which are interested in establishing a cure center. Although acceptance of the military and its noise tends to be greater in these remote rural areas for the most part, they too have a lower tolerance for noise during traditional German quiet times and especially during special events and ceremonies.

**Firing Ranges.** Noise is seen to be a problem at 65 percent of the MILCOMs (Table 2-1). Generally speaking the same issues apply at firing ranges as at LTAs, and the same management approaches are being employed (Table A-3). Several MILCOMs have designed their firing ranges using German noise control criteria and standards; some permit German groups (e.g. Polizei, clubs) to use ranges as a good will gesture.

When noise complaints are lodged they are often related to firing after hours, on weekends and/or on German holidays. Many local SOPs limit the amount of firing that can take place at each range, and prohibit firing during quiet hours. Many MILCOMs, however, permit civilian rod and gun clubs (whose membership may be heavily German) to use ranges on Saturdays, and in some cases Sundays. This non-military use of firing ranges is a major source of noise complaints (Figure 2-4). Other noise complaints that are received frequently come from people who enjoy using adjacent wooded areas for recreational walking or hiking. Essentially, several MILCOMs stated that Germans are tolerant of military training activities within prescribed or agreed to limits, but seem much less tolerant of recreational noise, especially on weekends.

**Base Operations.** Noise associated with base operations is seen to be at least a moderate problem at 50 percent of MILCOMs (Table 2-1). Noise makers on the MILCOMs are electrical generators used for emergency power or remote power sources, and large air conditioning and refrigeration systems. The worst source of noise complaints, however, is the motor pool. Nearly every kaserne has a motor pool of some type. Some are small, servicing only small vehicles and do not cause problems. Others are very large and house a wide variety of equipment such as tanks, Bradleys, heavy trucks and engineering equipment. Larger motor pools frequently are located at or near kaserne property lines adjacent to German housing (Figure 2-5). Residents complain, not only about noise, but also about air pollution and safety issues.

Many of the motor pools are adjacent to garden plots or "klein garten", a use that most people would consider to be compatible with noisy operations. However, the German klein garten is a major form of recreation for many Germans. People work their small plots of ground in the evenings, and weekends. Often people spend the weekends at their plots in small tool shed like buildings. For these people motor pool operations are an irritant.

Many kaserne have constructed noise barrier walls around their motor pools in response to noise complaints. In some cases these barrier walls have been partially justified on security grounds as well. In addition, local SOPs have been written to regulate motor pool operations. Maintenance on heavy vehicles may be limited to daylight hours, and may be closed down between 1300 - 1500 hours. Some SOPs require that start up and operation of heavy equipment may not take place before 0830 (Table A-4).

Considerable frustration was expressed about the Army's loud generators as compared with a number of much quieter generators that are available commercially or that are in use by the German Army. Problems with generators have been addressed in a variety of ways such as enclosures, relocation, repositioning, and, in some cases, substituting commercial power sources when they could be made available. Air conditioning and refrigeration equipment are frequently enclosed to contain noise emissions.

**Convoys.** Noise associated with convoys is seen to be a problem in 58 percent of MILCOMs (Table 2-1). Where it is a problem, it involves the movement of heavy vehicles through narrow streets of German villages (Figure 2-6); such situations create complaints that are as much about traffic congestion, air pollution and safety as they are about noise per se. People seem to be more apt to complain about convoy noise when it occurs during the night, on weekends, and on German holidays (Table A-5).



Figure 2-4. Black Powder Range, Bad Toelz



Figure 2-5. Tank Motor Pool, Aschaffenburg



Figure 2-6. Entrance to Daley Barracks, Bad Kissengen

**Recreation/Housing.** These activities have been grouped together for discussion because the problems associated with them are very similar. While 23 percent of MILCOMs felt that noise issues were of such a magnitude as to constitute at least a moderate threat, these types of problems were reported in almost every MILCOM visited (Table 2-1). In general, these noise problems relate to "personal" activities and have a cultural basis. They involve loud music when GIs enjoy themselves after hours at clubs on Kaserne or at their quarters on or off post. Other problems occur when US citizens engage in behavior that would be perfectly acceptable in the US, but which violate German norms (e.g. mowing lawns on Sunday; idling cars in the morning to warm them up). While not "recreational", cadence calling during morning PT and runs is a commonly mentioned noise problem (Table A-6).

The management of the problems associated with these types of noise issues appears to be complaint driven. That is, when a complaint occurs the circumstance is investigated and if the complaint is deemed to be "legitimate" some corrective action is taken. Legitimacy of complaints is generally determined by evaluating the amount of noise against personal standards. For example, if complaints about excessive noise from the enlisted club are received after hours, the staff duty officer or installation coordinator may go and listen some distance away from the club. If it sounds "too loud" to that individual the club will be required to lower the volume. Policy letters have been written to address the use and misuse of radios. Responses to complaints about cadence calling include policy letters and SOPs limiting cadence calling to kaserne property, or posting signs where cadence calling is not allowed (Figure 2-7).

### **Significance of Noise Problems**

Noise appears to be the most significant environmental issue facing MILCOMs. Table 2-2 shows that noise was consistently rated to be the most significant environmental issue affecting MILCOM activities. Noise is the issue that most consistently impacts upon the activities that the Army needs to be engaged in to be able to do its job. Additional evidence is provided in Table 2-3 which shows the averaged responses to a question contained in the EPA which asked individuals whether they agreed or disagreed with the statement that the mission of the MILCOM could be seriously affected because of noise in the next 3 to 5 years. As can be seen, a majority of those at 10 of the 24 MILCOMs where this question was asked agreed (42%).

### **USAREUR Noise Management Approaches**

In this discussion of noise problems in USAREUR it is important to stress that most MILCOMs are managing noise controversy in a capable and sincere fashion. Researchers were continually impressed with the professionalism displayed by those at MILCOMs. Some very effective noise management approaches are in use; these will be described in the next chapter.

While noise issues are being addressed, there are several factors which tend to diminish the overall effectiveness of efforts. First, there is an overall lack of policy to provide consistency of action and approach. This lack of consistency may manifest itself within MILCOM organizations (e.g LTA versus airfield) or when Commanders with radically different "styles" assume leadership. It may also manifest between MILCOMs and allow German

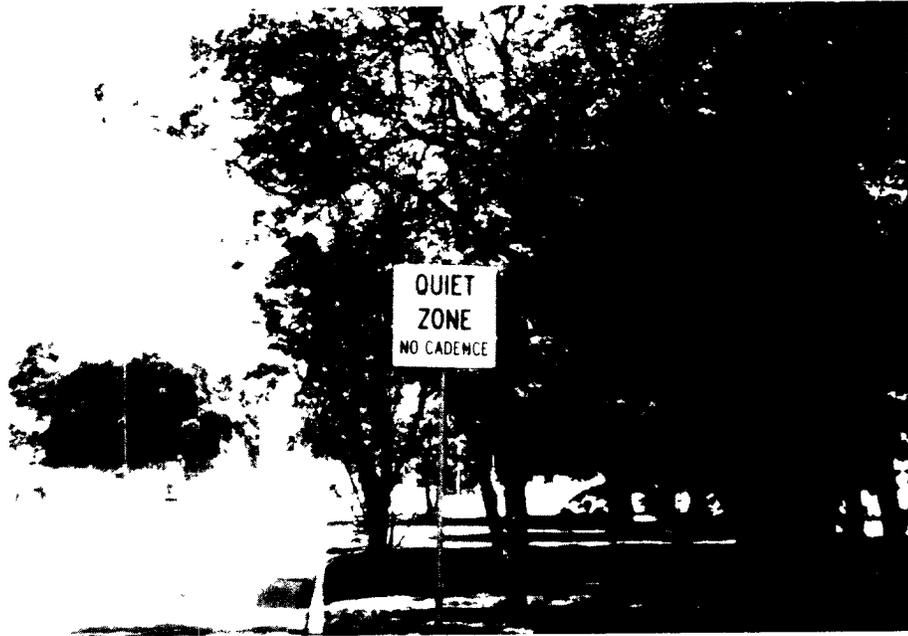


Figure 2-7. Restriction of Cadence Calling, Augsburg

TABLE 2-2

**PERCENTAGE OF MILCOMS REPORTING ENVIRONMENTAL PROBLEMS WITH MILITARY ACTIVITIES**

MILCOM ACTIVITY	ENVIRONMENTAL PROBLEMS				
	Noise Pollution	Air Pollution	Water Pollution	Hazardous Waste	Oil Disposal
Airfield/Aircraft Ops	77%	15%	23%	8%	19%
LTA/MTA Training	54%	8%	23%	12%	23%
Firing Range	65%		8%	12%	4%
Base Ops	50%	19%	31%	35%	43%
Convoys	58%	31%	8%	4%	15%
Recreation Activities	19%	4%			
Housing	4%			8%	4%

## Effect of Noise on Mission

Organization/ Location	Degree of Noise Effect
Heidelberg/2	Missing Info.
V Corps	
Bad Kreuznach	0000000
Baumholder	0000000
Darmstadt/1	Missing Info.
Frankfurt	0000000
Fulda	0000000
Giessen	0000000
Hanau	XXXXX
Mainz/1	Missing Info.
Wiesbaden	0000000
Wildflecken	XXXXX
VII Corps	
Ansbach/3	Missing Info.
Aschaffenburg	XXXXX
Augsburg	0000000
Bad Toelz/1	
Bamberg	XXXXX
Goeppingen	0000000
Heilbronn	0000000
Munich	
New Ulm	XXXXX
Nuernberg	XXXXX
Schweinfurt	XXXXX
Stuttgart	0000000
Wuerzburg	0000000
21st Sup Com	
Kaiserslautern	XXXXX
Karlsruhe/4	Missing Info.
Mannheim/2	Missing Info.
Pirmasens	
Rheinberg/4	
Worms	XXXXX
Zweibruecken	
7th ATC	
Grafenwoehr	XXXXX
Hohenfels/4	Missing Info.

The degree of noise effect was based upon responses to the following question:

How do you feel about the following statement:  
"Noise controversy could impair our mission capability here within the next 3-5 years."

- 5 [ ] Strongly Agree  
 4 [ ] Agree  
 3 [ ] No Opinion  
 2 [ ] Disagree  
 1 [ ] Strongly Disagree

### Key:

XXXXX = Believe that mission capability could suffer in the future because of noise, (based upon an average score greater than or equal to 4).

000000 = Do not believe noise presents a threat to mission capability, (based upon an average score less than or equal to 2).

Blank = No Opinion, (based upon an average score of 3).

### Notes:

1. Prepared centrally in response to TWIX
2. IWR Assessment
3. Not Surveyed
4. EPA Not Performed

communities to play one MILCOM off against another by comparing noise management approaches.

Another major weakness that can affect current MILCOM noise management efforts is a lack of an underlying rationale about how to approach noise controversy. The basic approach now in use in most MILCOMs is to be responsive to noise complaints. In general, however, this is a reactive orientation. With few exceptions most efforts are directed at responding to complaints. While such efforts can be effective, they can also have undesirable consequences. In particular, they can result in making concessions to German communities that erode training capability. The data collection revealed that many operational adjustments have been made to respond to noise complaints. No doubt many of these changes are benign and pose little or no risk to operational capability. However, this is not true in all cases; and, the cumulative effect of many small, seemingly insignificant reductions in operations is difficult to assess.

MILCOMs need policy and a rationale that allows complaints to be dealt with from a position that provides consistency, and a thorough examination of the implications of how the complaint is responded to. In addition, the thrust of noise management efforts need to be refocused from one that is now largely reactive to one that stresses prevention of complaints and controversy.

Finally, the current noise management efforts often suffer from a lack of resources. Noise management approaches such as the construction of noise barrier walls or generator enclosures could be much more heavily used; however, funds necessary for their construction are often difficult to justify and obtain.

### **Problems Which a NMP Can/Should Address**

A number of problems underlie or are generic to many of the noise problems reported in the previous sections. These problems are briefly enumerated below. They are logical targets that a NMP should try to resolve.

- There is a lack of emphasis from the command that noise management is no longer just a "nice to have", but rather that it is now an essential for the long term viability of mission capability.
- In-coming commanders do not always know about/care about preceding agreements (formal or informal) with German communities about local noise control (e.g. policies about cadence calling, observance of quiet hours, reveille, etc.).
- In-coming troops do not know about quiet hours, customs regarding noise activities, etc.
- Tactical units do not always obey local SOPs; they do what they want, create problems for the MILCOM and then leave. Such units may make unnecessary noise by violating agreements that the LTA has regarding noise control; but since they are outside the chain of command of the MILCOM and often outside the Corps command they are difficult to control.

- We do not always tell the German public and governments what we are doing to control noise; as a result some have the impression that we are not doing anything, when we really are.
- There is no general framework for evaluating complaints. Our system is complaint driven, and reactive.
- There are no general procedures to ensure that noise complaints are handled promptly and meaningfully; very little useful data is obtained as a result of noise complaints -- even though much could be learned if data were kept in some systematic fashion.
- Generators (and air conditioners, and refrigeration equipment) are often poorly placed, and operated continuously.
- Night-time alerts and run-outs disturb near-by neighbors
- We do not make as much use of the OFD and FMOD as we should to present the US point of view and interests in assuring local communities that good faith efforts are under way to control noise -- while still maintaining mission capability.
- The use of firing ranges by local Rod & Gun clubs on weekends, and nights is a major source of irritation with firing ranges.
- The continuing development of residential land uses adjacent to air fields and LTAs creates additional pressures on these facilities to be quiet.
- Early morning run-ups, and other exceptions to established policy regarding aircraft noise control generate a major share of noise complaints.
- When the US closes down an activity, and then at a later date reopens it, it creates conflict because people have become habituated to the quiet, and often new development has encroached in the interim.
- Access roads to facilities such as airfields and LTAs sometimes bring heavy vehicles right through the middle of small towns creating noise and air pollution.
- Motorpools located adjacent to housing areas are unshielded; maintenance is pulled on vehicles during quiet hours.
- A majority of noise controversy appears to stem from noise making activities carried out during German holidays, during quiet hours, and/or during the night.
- Incremental concessions in response to noise complaints are reducing mission capability. Each concession appears relatively small; however, the cumulative effect is significant. Pressure from noise complaints is constant on MILCOMS.

## Summary

An extensive data collection effort has revealed that noise controversy poses significant problems within USAREUR. In fact, noise is widely perceived to be the most significant environmental problem facing USAREUR. Noise controversy is being managed in MILCOMs creatively. However, the lack of consistency across and within MILCOMs, the tendency to make concessions that sometimes affects operational and mission capability, coupled with a general lack of command support combine to reduce overall effectiveness of noise management command-wide. It is our general conclusion that noise problems will continue to grow worse and more difficult to contain in the absence of some more systematic and proactive management program. Several generic and/or underlying problems were identified as being targets for a NMP. The next chapter looks at some general ways that such problems can be addressed.

## Chapter 3

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### Noise Management Techniques and Principles

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This chapter presents a short catalog of noise management techniques to emphasize the fact that noise issues can be managed in a variety of ways. Many of the techniques referenced are already in use within USAREUR. The second part of the chapter moves beyond techniques to a concern with the programmatic aspects of noise management. This section focuses on a number of principles that appear to be characteristic of effective noise management programs. The implications that these principles or "lessons learned" have for configuring a USAREUR NMP will be discussed.

#### Noise Management Techniques

Noise management techniques are grouped into four general categories. These categories are physical measures, operational and administrative changes, public relations/interaction measures, and land use control.

##### Physical Measures

These techniques are aimed at physically reducing the amount of noise that impacts the public. Several common physical techniques are discussed below.

**Designing Quieter Equipment.** Noisy equipment can often be significantly quieted if it is designed with quiet operation in mind. Commercial jet aircraft, for example, have achieved substantial reductions in noise in the last decade as a result of deliberate design modifications for enhanced quiet.

In the case of Army equipment not much thought appears to have been given to the quietness of much of its equipment - e.g. generators, heavy vehicles, etc. In some cases the noisiness of this equipment may represent an explicit trade-off to achieve greater performance; however, there would appear to be substantial opportunities to investigate the feasibility for incorporating quiet operation into the design of Army equipment.

Personnel in the MILCOMs who were interviewed often made the suggestion that quieter equipment might offer less detectability and might be tactically more desirable as well as less prone to provoke noise controversy.

**Barriers and Enclosures.** These structures reduce the sound exposure by interfering with the travel of sound between its source and the receiver. They can be quite effective in controlling mid-range frequency noise like that associated with vehicles and generators.

Noise barrier walls are fairly common in motorpools in USAREUR MILCOMs (Figure 3-1). In most cases they are thought to have proven effective in reducing noise exposure of the German public. Similarly, there are a number of generator enclosures in evidence.



Figure 3-1. Noise Barrier Wall at Motor Pool,  
Aschaffenburg

Barriers have only limited effectiveness in reducing low frequency sound or impulse noise such as that associated with larger caliber weapons and explosives. The characteristics of the sound waves make it unfeasible to construct high enough walls to pose a barrier to the sound.

At firing ranges a system of coffered ceilings over small arms ranges can reduce noise by 10 - 15 decibels -- a significant amount (Figure 3-2). This system is being employed by the German Army at 22 of its firing ranges (Buchta, 1988b).

**Suppressors and Silencers.** These devices are still in the development stage and include the silencer for the 25 mm gun, and a tank gun muffler. Given the large quantities of sound energy released with larger caliber weapons, there have been major difficulties in producing effective silencers that are of small enough size to be useful and feasible in most training settings.

**Acoustic Design.** This category of techniques refers to designs for buildings and sites that incorporate a concern for noise. It can include the siting of noise making activities in locations away from noise sensitive areas or the siting of such activities in areas where terrain features can serve as barriers or buffers for noise. Siting with a concern for noise can include the strategic placement of open space in designs to reduce noise; the construction of buildings to serve as noise barriers or to focus noise in particular directions; and the design of buildings to reduce noise impacts on occupants.

### **Operational Changes and Administrative Measures**

These techniques modify the way in which noise making equipment is operated or used. Common techniques include:

**Changing times of operation.** Since annoyance with noise usually can have a time-dependent aspect altering operations to exclude times when annoyance is highest can sometimes be an effective noise management approach.

USAREUR has instituted such a policy with its prohibition of air training flights between 2400 - 0700. In addition, some MILCOMs have administratively limited certain operations to exclude quiet hours or holidays. In some cases changing hours of operation can be appropriate; however, there may be situations where operational changes cannot be made without jeopardizing mission capability.

**Changing locations of noise making activities.** Activities can be physically relocated away from noise sensitive areas. For example, firing points can be relocated; generators can be reoriented so that noise is focused away from noise sensitive areas. On airfields run-ups and maintenance activities can be relocated to more remote parts of the field.

Once again, there was ample evidence of these sorts of techniques at MILCOMs.

**Using training rounds, smaller charges, etc.** Some MILCOMs routinely use smaller caliber weapons to simulate larger ones; others have used lights or lasers to simulate weapons fire.



Figure 3-2. Firing Range with Coffered Ceilings,  
Wuerzburg

**Avoiding firing on "high risk" days.** Certain atmospheric conditions can greatly amplify noise (Table 3-1). It is possible to monitor operations, and when such high risk conditions are present to postpone or suspend noisy operations.

### **Public Relations and Interaction Measures**

Acting to reduce noise through technological or operational measures are the most common types of noise management techniques. However, another group of techniques is focused on dealing with the subjective component of annoyance. This group of techniques proceeds from the assumption that since annoyance with sound is heavily subjective there may be ways to modify perceptions.

**Public Information.** These techniques are aimed at informing those impacted by noise about why noise is being made. The premise is that greater information is likely to promote understanding of why noise needs to be made, and a greater acceptance of the noise making activities.

Information can also be provided about the duration and extent of noise events to permit individuals to prepare themselves -- under the assumption that if people know the duration they will better be able to accommodate themselves to the noise.

A related concept is the use of prior notification to forewarn individuals of exceptional noise events to avoid the "startle" effect that can occur with sudden noises. These events have been found to be especially annoyance provoking.

Public information activities about noise are widespread in USAREUR MILCOMs. Several MILCOMs notify German citizens living in the vicinity of training facilities of upcoming noisy events, and explain why the training needs to be performed. Many MILCOMs actively seek to inform German publics about the Army's activities and procedures by using public information brochures, open houses, and displays at fests, etc.

**Public Interaction and Problem Solving.** Interaction approaches move beyond simply informing the public as a way of dealing with annoyance, and focus on actively involving those impacted by noise or their representatives in a search for ways to address noise problems. Interaction approaches rest on a number of principles:

- by participating, a greater incentive to abide by whatever solutions are developed emerges; participants develop ownership of the outcome.
- participation ultimately is likely to yield less confrontation and conflict because each side is likely to develop a greater understanding of the constraints and interests of the other.

Noise management programs have employed a variety of ways to involve the public or their representatives. Perhaps the most common are advisory groups that actively participate with noise makers in the consideration of issues. Such groups can be purely advisory or can actually have decision making power depending on how they are constituted and chartered.

Once again, there are examples of public interaction and problem solving within USAREUR. Many MILCOMs have established Community Relations Advisory Councils

## "GOOD" AND "BAD" FIRING CONDITIONS

### "GOOD"

- CLEAR SKIES WITH BILLOWY CLOUD FORMATIONS, ESPECIALLY DURING WARM PERIODS OF THE YEAR
- A RISING BAROMETER IMMEDIATELY FOLLOWING A STORM

### "BAD"

- DAYS OF STEADY WIND (8-16 KM/HR) WITH GUSTS OF GREATER VELOCITY (ABOVE 32 KM/HR) IN DIRECTION OF RESIDENCES CLOSE BY
- CLEAR DAYS ON WHICH "LAYERING" OF SMOKE OR FOG IS OBSERVED
- COLD, HAZY OR FOGGY MORNINGS
- DAYS FOLLOWING A DAY WHEN LARGE EXTREMES OF TEMPERATURE (20°C) BETWEEN DAY AND NIGHT
- GENERALLY HIGH BAROMETER READINGS WITH LOW TEMPERATURES

(CRAC) or other similar fora to actively involve important German constituencies in the consideration of problems or issues of joint concern. Several MILCOMs have formed subcommittees within the CRAC to focus specifically on noise problems. Some MILCOMs have also formed workgroups composed of MILCOM technical specialists and their German counterparts from local government agencies to consider a range of environmental issues.

**Complaint Handling Procedures.** An important component of noise management programs is the way that noise complaints are dealt with, and the use that is made of the information that a noise complaint constitutes.

Complaints are generally a manifestation of personal annoyance; however, in some cases this annoyance may not be about noise per se. For example, at a USAREUR MILCOM it was noted that one of the most vociferous complainers only began to complain about noise when the individual lost a second parking space which happened to be on MILCOM property when security was increased. It appears in this case that complaints may have more to do with annoyance over the loss of the parking space than with noise. There are other cases where noise complaints have a political basis. In most cases, however, noise is clearly the most important source of annoyance when people complain about noise. They represent requests or demands for relief from noise.

Complaint management is premised on the concept that there are two levels to complaints. The most obvious level that the complaint handling procedure needs to address is the substance of the complaint. Basic information concerning the "who, what, where, when, and how" of the situation needs to be recorded so that a better determination of the nature of the problem can be made. In some cases, corrective action can be taken to address the substance of a complaint.

In other cases this may not be possible. There may be no feasible corrective action that can be taken. In such cases it is especially important to be attentive to the second level of response -- that is, to what could be termed personal and identity needs. If people feel that they have been listened to, that they have been treated with respect and courtesy, and that their complaint was taken seriously and responded to promptly, it is quite likely that their annoyance with the noise maker and their propensity to escalate their complaint will be reduced.

Most PAOs have a good understanding of the principles of complaint management, and are conscientious in responding to personal and identity satisfaction issues. However, there were wide variations concerning the handling procedures employed. Not all complaints that come into a MILCOM are directed to PAOs. Some stop at particular offices (e.g. LTA coordination office; airfield, etc.) where it is not always clear that those responding to complaints have the requisite skills to manage complaints properly. Not all MILCOMs make it easy for complainers to complain - telephone numbers or other information as to who to complain to are not always provided to German communities. Apparently in these situations it is felt that if it is made difficult for those wishing to complain, that complaints will somehow go away.

Experience in other noise programs suggests that this assumption is generally not correct. The actual situation is more likely to resemble a tea kettle that is boiling and is capped. For a time there is no apparent activity, however, after a certain point, the pent up pressure can explode with a greater destructive force than if the pressure had been allowed to escape in a controlled fashion.

Accumulated noise complaints offer a valuable source of data for a noise management program. They can reveal patterns that noise-makers can use in planning. For example, accumulated complaint data can provide information about the type of situations that produce the most complaints, times of day or day of week, location, etc.

Most MILCOMs do not make such use of noise complaint information. In some cases, PAOs may have a general idea of patterns in complaints based on years of experience, but the information is not maintained systematically, nor is it capable of being easily transferred to new personnel.

### **Land Use Control**

A central feature of many noise management programs are efforts to prevent noise sensitive land uses such as housing, schools, churches, etc. from being developed in areas that receive significant noise impact. The assumption is that if the type of land uses that require quiet can be kept away from noise through zoning or other means, future noise problems can be reduced.

Many noise programs around airports in the United States, as well as the Department of Defense's Installation Compatible Use Zone (ICUZ) and Air Installation Compatible Use Zone (AICUZ) programs have the goal of achieving noise compatible land uses in noise impacted areas.

Land use compatibility programs have several common stages/components:

- the noise making facility generally tries to take steps to reduce noise emissions that are consistent with its mission, and which are cost effective,
- a representation of the noise made from the facility (airport, military installation, etc.) is plotted on community development maps showing current and future planned land use,
- the noise making facility then tries to influence the community land use planning process to achieve noise compatible land uses in those areas where high noise levels reach out beyond facility boundaries. Noise compatible land uses are those that where noise has a low potential for annoying people -- either because few people are present, such as with agricultural land uses, or because significant noise is already being made, as with heavy industrial land uses, or because building construction is of a type that significantly attenuates the noise, as with certain types of large commercial structures.

Such programs have achieved only modest success in the United States. Chief obstacles to their greater effectiveness have been the reluctance of many communities to exclude valuable land from the type of development that such programs advocate (Planning and Management, Ltd., 1988: 123).

Within USAREUR there was only minimal evidence of MILCOMs having tried to interact with the German land use planning process to try to achieve compatible land uses around MILCOM facilities. In most cases, land surrounding MILCOM assets is already heavily developed in residential and mixed residential land uses. However, there is substantial open space at some facilities, that if developed in non noise sensitive land uses would forestall problems. There was evidence of encroachment of noise sensitive land uses around airfields and LTAs (Figures 3-3 and 3-4). Often when new apartment buildings or residences were constructed adjacent to such facilities new residents would begin to complain about noise.

### **Characteristics of Effective Noise Management Programs**

While there are many individual techniques for dealing with noise issues, they do not make a management program. A noise management program is a focused combination of techniques packaged into an integrated whole that is designed to achieve some goals, and have continuity. Generally these goals relate to protecting the public from noise impacts, and protecting the ability of the noise maker to continue with its primary purpose.

Noise management programs that have been effective in achieving their goals appear to have several characteristics in common. These characteristics are presented below.

**Commitment of Senior Leadership.** Executive leadership sets the tone for the manner in which the entire organization will approach noise management. For a noise management program to be effective executives must communicate their commitment to the program, and must actively encourage the type of behaviors that support the goals of the program. Generally speaking, when executives believe that noise management is serving a useful function they will actively support and encourage a program. In circumstances where executives have not been convinced that noise management is helping, programs have not been supported.

In the case of USAREUR, there appears to be a significant recognition that noise issues pose a serious problem, and do, in fact, constitute a threat to mission. There also appears to be a belief that noise is going to continue to be a problem. There is thus a base for building the type of executive commitment that an effective NMP needs. As the NMP is developed care must be taken to ensure that executives commit to the program's specifics. The only guarantee for obtaining this level of commitment is to ensure that the program adequately reflects leaderships' views, values and interests.

**Noise Management Needs a Consistent Rationale for Dealing With Noise Issues.** Noise management programs generally try to institute a general framework to provide a basis for action in place of an ad hoc response to complaints. Complaint driven programs have several problems. First, they are essentially reactive in nature. The facility reacts to what has already occurred - it has lost the opportunity to be proactive. Second, it is difficult to respond to complaints in a consistent fashion. In the absence of definable criteria there is little that a facility can do in its defense - particularly against powerful complainers. Reacting in an essentially ad hoc manner to complaints may also result in creating bad precedents and decisions that create more problems in the future.



Figure 3-3. Encroachment of Residential Development,  
Fulda Airfield



Figure 3-4. Encroachment of Residential Development,  
Aschaffenburg LTA

For these reasons, NMPs generally provide a rationale for action that is based on definable criteria or principles. In the United States many NMPs employ a noise descriptor called the Day Night Level (DNL) to serve as a base for programs. The DNL descriptor is a composite measure of the sound energy produced by a facility, together with a penalty assessed for night-time noise. DNL has been shown to correlate closely with annoyance with noise reported by the general population.

Agencies have established planning guidelines using DNL as a basis for action. For example, HUD has promulgated guidelines which limit its issuance of Federally guaranteed mortgage insurance on new homes that would be constructed in areas with an exposure to a DNL exceeding 75. While such policies may not reduce individual complaints, the presumption is that given some relationship between general annoyance levels and complaints, some potential complaints will be reduced by trying to keep DNL within prescribed levels. Further, by following prescribed procedures the facility is on a stronger legal footing when dealing with chronic complainers or others whose complaints may have other bases or agendas.

In Germany a number of laws provide the framework for dealing with noise. The primary legal basis include the Federal Emission Control Act; the Technical Instruction for Providing Protection Against Noise (TA Laerm); and the Federal Aircraft Noise Control Act of 1971 (Buchta, 1988). Based on these and other state and local regulations a variety of noise standards have been promulgated. In general these require facilities regulated to keep the noise emanating from the facility boundaries within certain decibel levels. Once again, this approach provides a basis for action, and a means for providing a consistent response to noise complaints.

USAREUR facilities find themselves in a legal purgatory. They are exempt from German laws under conditions of the Status of Forces Agreement (SOFA), and are also not bound to the letter of Army regulations concerning noise. While occupying this status may allow a certain operational flexibility, it is not without costs. Germans are increasingly offended by the lack of equity that the situation bespeaks. Some point out that the German military has come under the provisions of German noise laws, and wonder why sending states remain exempt. Besides the ill will based on equity concerns, the lack of a basic rationale and framework for approaching noise means that noise management can become a largely complaint driven process.

And in USAREUR noise management is largely complaint driven. Despite the fact that there are some innovative and effective noise management procedures in use in the MILCOMs, the fact remains that the noise management is essentially reactive in nature. As a result of a lack of overall program direction there is little consistency in managing noise issues across MILCOMs. In some cases this fragmentation has resulted in the ability of German communities to play one MILCOM off against another. In other cases, MILCOMs have made concessions which have resulted in loss of operational capability and which may have created bad precedents.

**Noise Management is Interdisciplinary.** Noise management is a multi-faceted issue that requires the input of a variety of specialties. Most programs blend technical noise management expertise together with those who can contribute. These include:

- public affairs
- noise makers
- executives
- legal advisors

**Noise Management Must Be Integrated into the On-Going Activities of the Facility.**

Programs that are effective are not "add-ons", but rather are a part of the "way business is done". At airports, for example, planning for upgrading facilities automatically involves noise mitigation and acoustic design.

**Training.** It is essential that training be provided for those with responsibilities for operating a noise management program. Training should provide the overall rationale and key concepts of noise management. Training should be a continuous process. Military noise management programs in particular have been plagued by high personnel turnover rates, so that without constant training, an installation can quickly lose its expertise.

Once again, this principle is vital for a USAREUR NMP. USAREUR personnel turnover is very high, to include many key civilian posts. It is imperative that continuous training be provided in the principles and procedures of the NMP, and that appropriate training be tailored for both command-executive levels, as well as worker levels.

### **Summary**

This chapter has presented an assortment of noise management techniques. It has shown that there are a wide variety of noise management techniques available to deal with noise controversy. As noted some of the techniques are already in use in USAREUR. A noise management program however, is more than a collection of techniques. It is an effort with a consistent rationale and policy focused on the attainment of goals. Several key principles and lessons learned from the inspection of other NMPs have been presented. These principles can prove helpful in developing a USAREUR NMP.

## Chapter 4

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### Design Criteria for a Noise Management Program

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In addition to learning about the noise management problems facing USAREUR a significant amount of time was spent learning about the way the command is organized, and about the expectations of those inside USAREUR for a NMP. As noted previously, it is essential that a NMP should fit into the normal way that the business of USAREUR is transacted, and also that the program be informed by the general expectations and goals of those in the organization who set policy and who carry it out.

The first section of this chapter presents several key themes regarding what a NMP should or should not do that were derived from interviews conducted with field personnel during the MILCOM fact finding visits. A more detailed listing of recommendations and suggestions is presented in Appendix B of this report. The second section presents several key design criteria that have been used to develop the recommendations for the USAREUR NMP. These design criteria are derived from the recommendations and suggestions made during the fact finding, as well as the views of senior leadership, and on the basis of our understanding of the organizational structure of USAREUR that we have developed during the research process.

#### Views on the NMP

Generally speaking those attending the briefings at the MILCOMs were receptive to the NMP concept. While there was general consensus about the need for noise management there was a broad range of opinions about what a NMP should and should not contain. The points below represent a general range of topics and issues that were raised about what should and should not be included in a NMP.

**Resourcing for a NMP.** Many felt that if a NMP were to be effective, and not just a "paper exercise" it must be adequately funded and resourced. As one individual noted: "If USAREUR is serious about noise management, a number of things ought to be done to convey this. First, they need to resource the program -- that is, provide the money to really do something about noise problems by dealing with the root cause -- noise too near people. We need money to move the noise sources away from people -- relocating our motor pools and billets to remote sites. If this is going to simply be a words program we can do that too, but not much will happen."

**Command Emphasis.** There was substantial agreement that in order for a NMP to be effective the message that noise management is important needs to be unequivocally stated by USAREUR, and made clear throughout the chain of command that USAREUR is serious. Recommendations in this vein included those that the topic of noise management be included at the USAREUR commanders conference, and at the Brigade and Battalion commanders conferences.

There was also some concern that a NMP not just be a program for MILCOMs to implement, but that it should place HQ USAREUR in a proactive role as well. Such a role should include raising issues of noise mitigation and the need for training flexibility at high levels in the governments of Germany and the United States to ensure that both governments are aware of the positive actions regarding noise mitigation that are being taken by the Army, and the negative impacts on mission readiness that noise complaint induced reductions in training are creating.

**Use of Standards.** Many felt that a NMP should be based on standards to provide the basis for making decisions about noise issues. When is a noise complaint valid? When is noise mitigation appropriate, when should money be spent to construct a noise wall?

Some felt that the German noise standards would be suitable; others left the issue of what standards to select open, but emphasized that standards should have legitimacy with Germans either because they were substantially the same as German standards, or because the standards presented a "united front" among all the allies.

A related issue concerned what might be termed standards contained in the policy that a NMP would have. Recommendations emphasized that policies should be specific and should present a firm rationale for making decisions. It was also recommended that any policy developed should very clearly state that the preservation of mission is the over-riding concern of the NMP. Finally, it was recommended that Corps representatives be included in the process that reviews and guides the development of USAREUR NMP policy.

**Training and Operations.** Two major themes run through recommendations relating to training and operational matters. One theme suggests that the U.S. should not train or conduct operations on German holidays or other quiet times. Such a recommendation was phrased in the following way by one individual: "There is no reason to have major operations on German holidays. It should simply be a cost of doing business in Germany that the US doesn't train on German holidays. Actually, we don't get too much done on those days without the Germans around anyway." The idea of looking at the costs and benefits of training and operational activities was raised a number of times to support recommendations for eliminating training during specific periods. For example, one individual questioned the benefits of alerts in an age of sophisticated electronic intelligence relative to the ill-will that they caused.

Another view recommends that there be no policy limiting training. Many supporting this position advocate that there be a "common sense" approach to managing training and operations: "Keep options open to train 24 hours a day seven days a week rather than publishing concessions that limit capability. Instead, 'train smart' by limiting needless noise in training, and by carefully scrutinizing unit requests to train on weekends, holidays, etc. to make sure that it is absolutely necessary, and not the result of poor planning." Others resist the notion of any limitations on training at all, and insist that it would be preferential to adopt a hard line and let the FMOD work out problems of public support and noise controversy.

Other recommendations made that relate to training and operations include the need to make noise limitation a matter of OPSEC and tactical security in training plans. Several

pointed out that noise control was a legitimate concern as a matter of detectability and increased survivability on the battlefield.

**Program Compliance Incentives.** There were differing views about how to motivate compliance with a NMP beyond command emphasis. The common view was that compliance be tied to OERs and other performance factors that are important to moving ahead in the military system. An alternate view, however, recommended against such incentives. Rather, positive reinforcement was recommended: "It's probably a mistake to try to build negative reinforcement into the program to motivate compliance. It's a natural tendency to want to tie compliance to OERs or to say that Article 15s will be given for noise violations, but these can often do more harm than good. Measuring performance, and compliance becomes difficult, and can actually reinforce the wrong sorts of behavior -- e.g. covering up noise complaints. Instead of negative reinforcement give the unit something for being proactive that they would like to have. For example, give them free money for needed projects if they institute some aspect of noise mitigation or reduction."

**Control and Responsibility for the Program.** While there was a general view that a NMP should be consistent across MILCOMs recommendations also suggested that local commanders have the autonomy to work out their own problems without being overly interfered with by USAREUR. Some emphasized that local commanders need to be directed to assume control and responsibility for noise management in more than the usual "the commander is responsible for everything" statement that attend to all programs.

Some recommended that Operations needed to manage the NMP in order for it to be effective; others stressed that all elements (PAO, DEH, JAG, etc.) that had something to contribute to the resolution of noise issues need to be involved in a NMP.

**Noise Mitigation Techniques and Methods.** A variety of recommendations were made about ways of controlling noise or influencing public opinion:

- noise barrier walls: encourage their use wherever possible, tie their use into the CSUP program on security barriers; develop category codes for their construction; provide information useful for the master planning process about them in master planning reference materials.
- generators: encourage the use of community power sources in place of generators whenever possible; develop quiet Army generator; obtain commercially available quiet generators.
- public information: publicize what is being done to control noise; implement a public relations program similar to the Air Forces "Flug Watch" to deal with Army aircraft noise complaints.
- command information: develop a noise control film to be shown to troops that is similar to what is now shown about maneuver damage.

## **Design Criteria for a NMP**

The following principles are felt to be consistent with USAREUR management philosophy and organizational structure. They were used to frame the recommendations made for the USAREUR NMP made in the next chapter.

### **The NMP should:**

- protect mission. This is the fundamental goal of the program, and the reason that USAREUR has invested the resources for its development. The program should constantly be oriented to this central concept
- put most responsibilities at the field level. USAREUR and Army management philosophy stress the importance of the decentralized execution of centrally developed policy. Commanders in the field have the best vantage point for assessing their situation, and should have the latitude in deciding how to carry out the general policy for noise management that will protect mission capability
- allow flexibility within the context of consistency across MILCOMS. Once again, the program should have a consistent policy that provides commanders with a clear message; however, the field commanders should have the right to develop their own ways to implement the policy that takes into account variables such as their community relations situation and the severity of the noise problems being encountered;
- provide resources and tools to enable the job to be done. Resources should be provided to back up the assertion that noise management is important;
- encourage accountability for noise management. Given that noise management is important to the continued ability to perform mission, there is a responsibility to manage noise in accordance with USAREUR policy and goals. Failure to do so, should be recognized for what it is -- jeopardizing the long term viability of mission capability;
- put USAREUR into situation of providing political muscle and clout to support MILCOMS. Noise management at the MILCOM level can benefit from efforts at the headquarters level to lobby and push for support from the German government;
- have an aggressive program of public information and participation -- lessons learned from elsewhere all reaffirm the fact that open communication is essential in the effective management of noise issues.

### **The NMP should not:**

- permit concessions to be made at MILCOMS that may be precedent setting or which compromise mission. While commanders should have the responsibility to creatively manage their own noise management programs, there needs to be limits on what can be done at the local level. One such limit is making deals with local German governments about matters that could affect operational or mission capability.

- be complaint driven; that is, the primary rationale for noise management strategies employed should rest on a broader base of evaluative criteria. A NMP needs to have an underlying rationale for dealing with noise issues. A USAREUR NMP should have some justifiable framework that permits the merits of complaints to be evaluated in a consistent fashion, and which allows planning and activity to take place. In some noise programs this rationale is provided by the use of noise descriptors or measurement procedures coupled with noise emission standards.

### **Summary**

This chapter has presented recommendations and suggestions about the USAREUR NMP that have been made during IWR's fact finding procedures. From these and other sources a series of design criteria have been developed. These criteria form a foundation for the recommended USAREUR NMP. The recommended program is described in the next chapter.

## Chapter 5

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### Options for a USAREUR Noise Management Program

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This chapter begins the process of developing recommendations for a USAREUR NMP by describing several generic options for a program, and by evaluating their effectiveness in protecting mission capability. Effectiveness of the options is evaluated within the context of a number of important sociopolitical factors in the Federal Republic of Germany. It is necessary to keep this environment in mind since an option which is appropriate to one set of assumptions about the future may be completely inappropriate in a different set of future conditions.

The three generic options discussed are:

- Adversarial Approach (adversarial relationship with local German citizens about noise control)
- Open Communication Approach (increased communication with German citizens and governments about noise issues)
- Evaluative Criteria Approach (using quantifiable criteria to guide noise management strategies)

These options each have adherents within USAREUR, and examples of the first two approaches can be found in some MILCOMs.

#### SocioPolitical Factors Affecting Noise Management Options

The list of sociopolitical factors below has been extracted from assessments prepared by USAREUR Host Nations experts (1986; 1988; Rasch, 1989), as well as the assessments of other knowledgeable sources. Important sociopolitical factors which impact the Army include:

- Increasing concern for environmental quality on the part of the general public, with less tolerance for environmental degradation and all forms of pollution.
- The continued growth of "Defense Weariness" which creates an increasing intolerance for the burdens associated with hosting a large military presence in Germany.
- A general skepticism about the reality and urgency of the threat posed by the Warsaw Pact, which leads to a greater intolerance for the negative environmental and social impacts of military readiness training.
- With a lowered perception of threat, increasing pressure to reduce the intensity of military operations.

- Increasing sentiment for "equity" among U.S. and Bundeswehr forces regarding training hours and procedures.
- "Judicial activism" which has greatly weakened the power of the federal government to "override" local objections to military activities on the grounds of "national security interests".
- Weakening support among Germans for present levels of military operations and even for U.S. military presence.
- The growing possibility of governmental changes at local state and national levels during the next eighteen months which will increase pressure to reduce military operations.
- The increasing salience of the "sovereignty issue" among Germans along with concomitant pressure to reduce de facto and even de jure SOFA rights.

### **Adversarial Approach**

Under this option noise management is seen as a contest between two groups with essentially incompatible interests. One group, composed of local German citizens and acquiescent local governments, demands quiet; the other group, composed of Army forces and Federal government officials, wants to be able to train in order to maintain mission capability. The contest is perceived to be zero-sum i.e. every gain one side achieves results in a loss for the other side. The German public is seen as a potential threat to Army interests, and consequently, efforts are directed at preventing Germans from finding out much about what the Army is doing regarding training and other activities. Operationally, the Adversarial Approach emphasizes:

- Reducing the amount of information provided to the German public and local governments to the bare minimum, under the presumption that the more information the public has, the more ways it can be used against Army interests.
- Ignoring noise complaints, and making it difficult for complaints to reach appropriate Army authorities under the premise that since there can be no compromise about training activities anyway there's really no sense in hearing the same old concerns.
- Ignoring pressure for reductions in training until absolutely forced to do so. In effect, the option stresses a policy of "don't give up any ground without a fight" as the way to hold on to what the Army already has.

Some within USAREUR favor this option because they feel it offers the only way of preserving whatever latitude to train that MILCOMs and tactical units now have. Unfortunately, as this report has shown, the facts do not support the contention that the status quo is being maintained. Incremental concessions are being made in the face of substantial, and increasing pressure from German publics and governments. In fact, the Adversarial Option likely encourages the mobilization of increasing pressure by Germans, and supports the establishment of more extreme positions, because it has been learned by Germans that the only way to achieve satisfaction is through such means. Rather than preserving the

status quo, a continuation of the Adversarial Option in the sociopolitical environment is likely to result in the following:

- Continuing incremental concessions from increasing and more forceful pressure mobilized by German citizens.
- Potential erosion of mission capability as an outcome of individual, piecemeal, incremental concessions made by MILCOMs in response to the pressures being brought on them.
- Worsening of relations with friendly Germans and risk to long term viability of mission posed by erosion of public support brought about by Army actions.

The Adversarial approach works best in a political environment where opposition is scattered, politically impotent, and concerned with issues which are perceived by the majority of the polity to be outside the normal political spectrum. These conditions do not match the sociopolitical environment. Opposition to noise is widespread, it is becoming politically powerful, and the issue of noise is assuming center stage with a large number of German citizens of mainstream political orientation. Given this situation the pursuit of an Adversarial Approach for managing noise controversy does not appear to be in the Army's best interests. It appears, that such an approach is likely to be difficult to maintain, and in fact, in the long run, may do more harm than good in preserving mission capability.

### **Open Communication Approach**

This option endorses efforts to inform those impacted by noise about why noise is being made. Efforts are directed at promoting public understanding of the need for training and readiness requirements to develop greater acceptance of the noise that is made. Major activities pursued under this option include providing notification and advance warning of exceptional noise events to German governments and citizens; providing information to German citizens about what is being done to control noise; and helping noise makers look at situations from the point of view of impacted German citizens to attempt to induce them to eliminate extraneous noise.

Another major aspect of the Open Communications Option is ensuring that noise complaints are dealt with courteously and promptly. The approach makes it easy to reach the MILCOM by publishing telephone numbers, contact points, etc. Guidance would be promulgated which would state that unnecessary noise is to be eliminated, and corrective action in response to noise complaints would be directed to eliminating or reducing such unnecessary noise.

Those at MILCOMs where such an approach is already in place generally feel that open communications have enabled MILCOMs to be more successful in managing potential conflict. These individuals report that educating Germans about why noise must be made, and demonstrating that the Army is trying to reduce noise whenever possible do help reduce noise conflict. Open communication has also helped Army personnel better see the situation from the Germans' standpoint; and therefore be more sensitive to the need to reduce unnecessary noise.

However, some within USAREUR resist the Open Communications Approach. A major source of concern is that the Army may just be providing more ammunition for the Germans to use against them. This view, however, fails to distinguish between the two groups which are annoyed by noise:

- Individuals and groups who are essentially supportive of the need for defense. For these persons Open Communication can be effective in reducing annoyance and propensity to complain by providing greater understanding, and by being sensitive to identity and recognition needs.
- Individuals and groups who are unsympathetic to defense. For these persons Open Communication is not likely to be effective; such individuals are, in fact, likely to use additional information provided by the Army against it.

Surveys suggest that the first group, those essentially supportive of the need for defense, is still numerically much larger than the second in Germany. It is this group that needs to be cultivated, and satisfied to ensure the long term viability of the Army's position. Failure to adopt an Open Communication policy could ultimately alienate those in this first group, and drive them into the arms of the second.

However, given the sociopolitical environment, the Open Communication Approach is not sufficient by itself for a comprehensive NMP. In the current environment, simple assertions that the Army is doing "all it can to control noise" are likely to be increasingly difficult to sell. The Approach also offers little in the way of defense against those individuals or groups who want to reduce noise regardless of defense implications, or who use noise as an issue for other political motives.

In the longer term, the Open Communication Approach is likely to lead into the next option to be presented -- the Evaluative Criteria Approach --for two reasons. First, as those managing the communication program respond to questions of increasing sophistication and specificity regarding the magnitude of noise being made, the issues of noise quantification and measurement are likely to be difficult to sidestep within the context of maintaining Open Communications. That is, in order to respond openly to questions about "how much" noise, and the impact of proposed options on noise levels, managers will be pushed in the directions of specificity and quantification if they are to continue to interact with the public in a forthright and open manner. Second, managers are likely to need some objective criteria to fall back upon in order to combat those Germans who approach the issue of noise control from an adversarial perspective. This aspect of the evaluative criteria approach is more completely discussed in the next section.

### **Evaluative Criteria Approach**

This approach establishes noise emission criteria in order:

- to provide a demonstration to the public that good faith efforts to manage noise are underway,

- to provide a "backstop" to resist pressures to reduce noise when appeals to reason have failed, and,
- to provide a means of gauging the extent of noise controversy which would likely occur if certain actions were undertaken in order to plan training and other activities.

Criteria would likely represent upper limits on noise emissions (expressed in decibels or other sound measurement units) from Army activities which could impact on German communities. Compliance with these criteria would be established through formal measurement procedures. Training and other activities would be evaluated in terms of the criteria, and adjustments made to achieve compliance. Technical issues that would need to be resolved in this approach center on defining the criteria themselves viz, how much noise is permissible; how should noise emissions be expressed (e.g. as an average over 24 hours; using a daytime average and a nighttime average; using an absolute upper limit, etc.). To be effective, any criteria developed would have to be seen as reasonable by German noise experts.

It should also be emphasized that evaluative criteria provide a means of support for Army noise making activities. Essentially, such support comes from being able to demonstrate to authorities and the public that the facility is taking noise into account in a responsible manner. A good example within USAREUR is the Mainz Tank Depot which operates in compliance with German noise standards. Because of its demonstrated compliance with these criteria, the facility is able to resist complaints and pressures about noise that it receives. Noise management programs in the United States and Europe have found adherence to noise evaluation criteria to be useful in defending against litigation and controversy. These criteria form the basis for a "principled" defense against noise controversy that is lacking in the other approaches. It establishes clearly why actions are taken - or are not taken - and forms a defense against those who seek to exert pressure to exact more concessions.

A source of concern for some within USAREUR is whether adopting evaluation criteria might pose a greater risk to mission than is posed by either the Adversarial or the Open Communication approaches. Research conducted for the preparation of the Strawman, as well as our interpretation of the implications of the socio-political environment lead us to conclude that the Evaluative Criteria Approach represents the best available general option for protecting USAREUR's interests. While the Open Communication Approach has proven to be effective in USAREUR MILCOMs, the approach does have shortcomings -- particularly in its fundamental inability to deal with groups whose annoyance and pressure stems from generally hostile motivations. Moreover, our view is that open communication ultimately will lead toward the development of evaluative criteria in order to respond to the demands for additional information that is likely to come from a public that is increasingly skeptical of both the need to make noise, and U.S. claims that it is doing all it can to control it. The Adversarial Approach is becoming increasingly difficult to sustain in the face of increasing pressure, and is likely to result in more far-reaching concessions limiting training capability in the future.

The appropriate USAREUR NMP needs to preserve toughness on the issue of maintaining mission capability that the Adversarial Approach attempts; but it needs to be able to do so without alienating the majority of Germans who, though deeply concerned about noise, con-

tinue to support the underlying goals of defense preparedness. The NMP also needs to have the Open Communication Approach's ability to build greater understanding on both sides.

The evaluative criteria approach blended with open communications, in our judgement, can meet these requirements. The approach provides the ability to be tough on the issues of maintaining training capability by providing criteria which - though they may be constraints - form a bulwark to fend off pressure and complaints. In configuring such an approach the following issues must be addressed:

- Evaluative criteria should not be so restrictive or rigid to prevent necessary training from taking place. On the other hand, to be effective as noise management tools the criteria should be capable of exerting influence on USAREUR planning and training decisions.
- The process of developing evaluation criteria would have to be seen as legitimate by German opinion leaders. To achieve legitimacy some involvement of German noise experts would be necessary, and there would be substantial pressures for noise emission criteria to match or closely approximate those to which the Bundeswehr must conform. But on the other hand, the Army must ensure that its special needs for training are recognized and protected.

These are difficult issues to address, but a NMP that meets USAREUR needs must do so. The next chapter describes how the recommended NMP addresses these issues.

### **Summary**

This chapter has presented three generic options for configuring a USAREUR NMP. Each option has been discussed in terms of its potential effectiveness for protecting USAREUR mission capability given a likely set of socio-political environmental factors. From this assessment it has been concluded that the Evaluative Criteria Approach, blended with open communication can most effectively protect USAREUR's interests in the socio-political environment within which USAREUR will likely find itself. The next chapter describes this option in more specific detail.

## Chapter 6

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### **Recommendations for the USAREUR Noise Management Program**

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This chapter presents IWR's recommendations for the general scope of a USAREUR NMP. Once again, these recommendations are based on the information presented in the previous chapters:

- the major noise problems that confront USAREUR, and our understanding of U.S. and German actions and circumstances that cause or contribute to the problems;
- the severity of the problems, their potential for impacting mission capability, and the sense of urgency that something be done;
- the preferences within USAREUR regarding how things should be done in general, and what a noise program specifically should and should not contain;
- "lessons learned" from the inspection of other NMPs;
- background information about the way Germans deal with noise issues;
- an evaluation of the effectiveness of several generic options for managing noise controversy within the context of important socio-political factors in Germany.

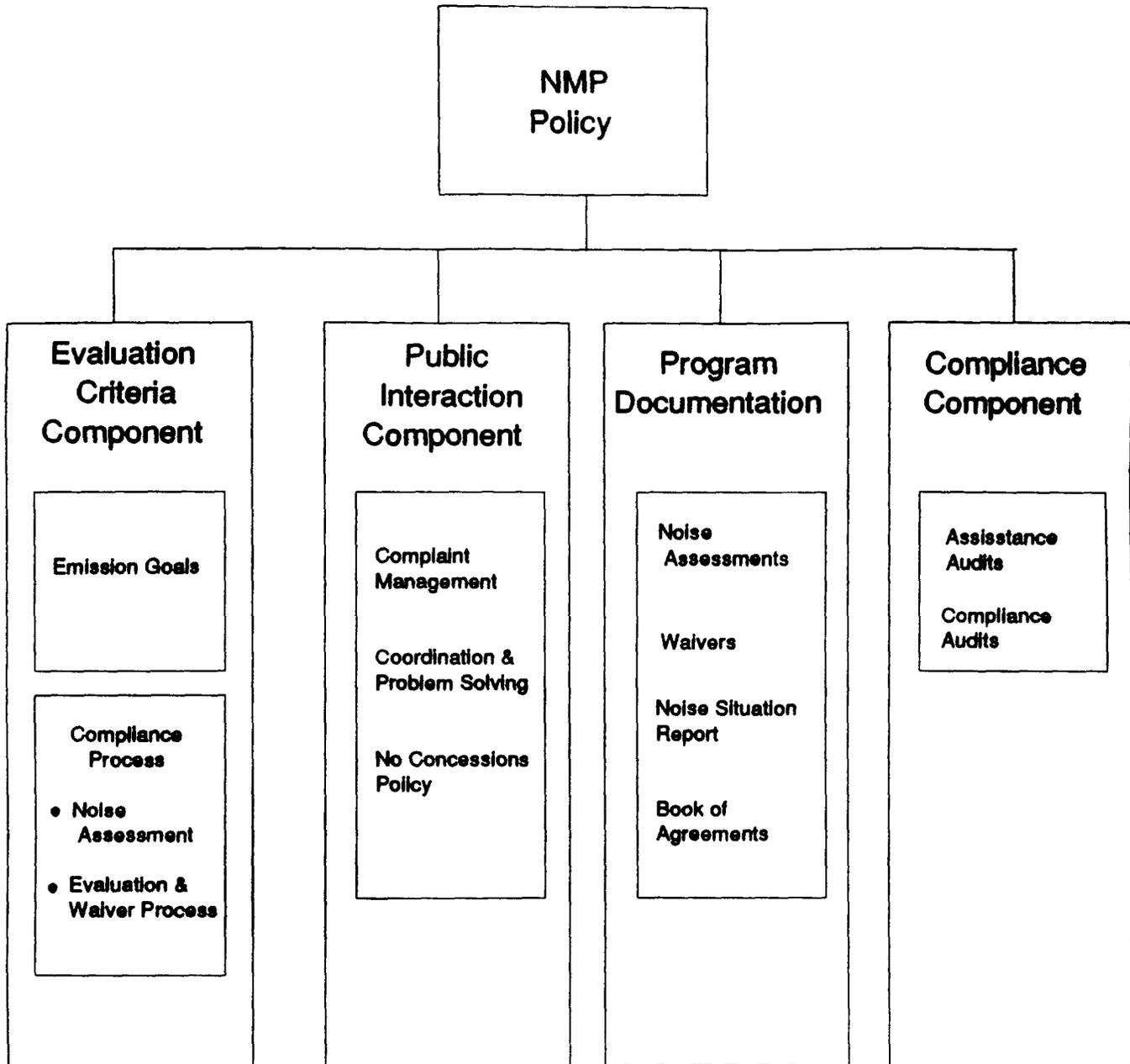
The recommendations below describe the overall program; roles and responsibilities for carrying out the program; and resources and support that a NMP should have. Recommendations are annotated at the end of this chapter to provide additional explanation and clarification.

#### **The USAREUR NOISE MANAGEMENT PROGRAM**

The program consists of several major components -- policy, evaluation, public interaction, documentation, and program compliance (Figure 6-1). Policy defines the major emphasis regarding noise management, and sets out broad goals. The evaluation criteria component sets out noise management emission criteria, and procedures used to evaluate activities and training for compliance with these criteria. The public interaction component provides guidance on open communications and complaint management procedures. The documentation component specifies record-keeping requirements for the program. The compliance component identifies how provisions of the NMP will be monitored. Each of these components is described below.

Figure 6-1

## USAREUR Noise Management Program



## **I. Policy**

A. Noise management is now part of the way USAREUR will do business in Germany. All training and operational activities, as well as base operations functions (including housing and recreational activities) are to be conducted so as to minimize adverse noise impacts upon German citizens, consistent with the need to maintain mission capability. [SEE NOTE 1]

B. It is a matter of command emphasis that German customs and/or ordinances regarding quiet hours are to be observed by US personnel attached to USAREUR. Commanders will ensure that personnel know about, and comply with observance of quiet hours consistent with training requirements. [SEE NOTE 2]

## **II. Evaluation Criteria Component**

### **A. Noise Management Emission Goals**

The goals for all USAREUR activities regarding the general policy above are as follows:

(1) No noise emissions above \_\_\_dB(A) should leave the boundary of US facilities on German holidays, on any day from 2400 to 0600; and on any day from 1300 to 1500.

(2) No noise emissions above \_\_\_dB(A) should leave the boundary of US facilities at any time.

These goals may be superseded where achievement would seriously conflict with the mission or with readiness requirements. However, exceptions to the achievement of these goals will be granted by waivers. [SEE NOTE 3]

### **B. Compliance with Goals**

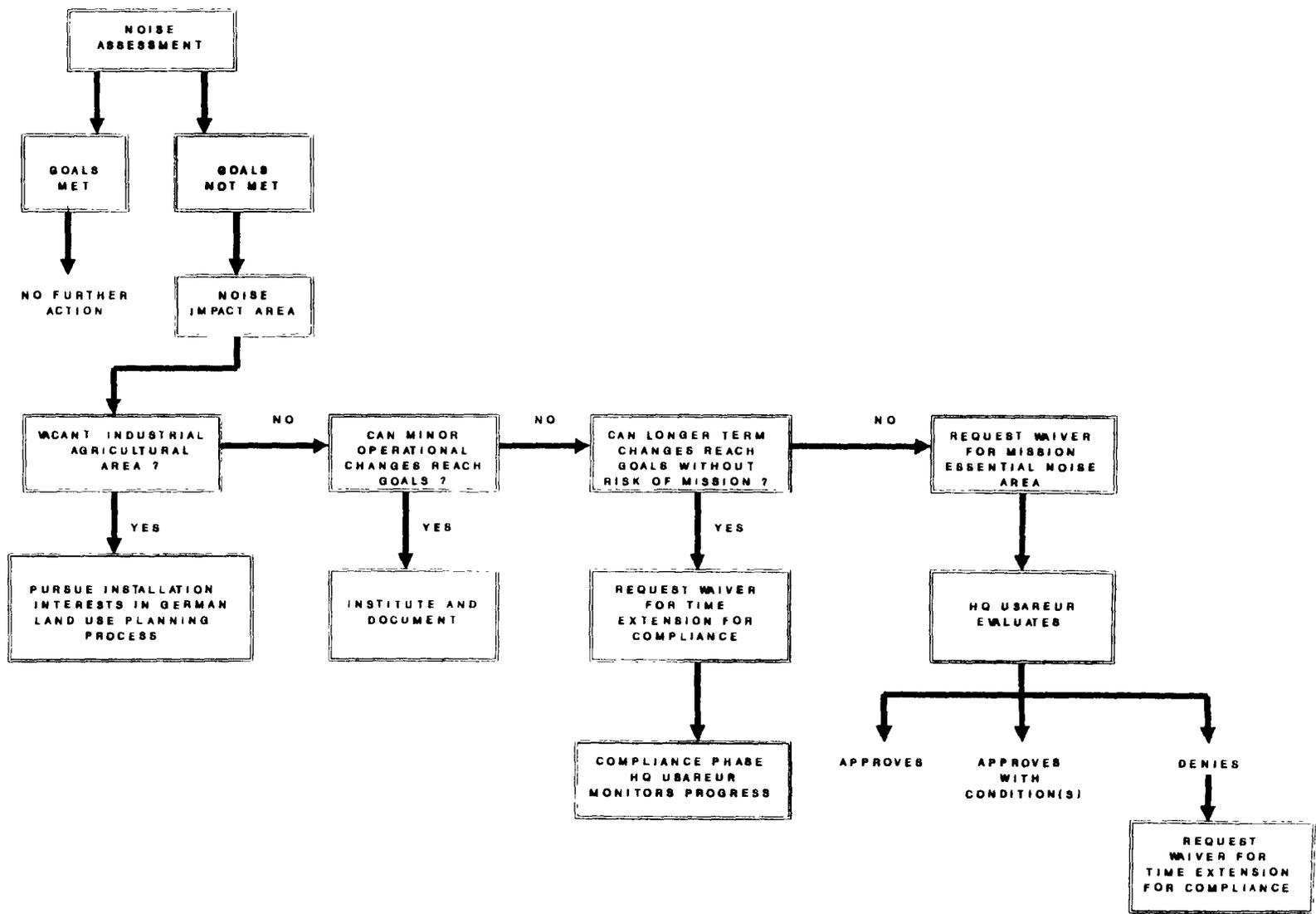
Within \_\_\_ months Commanders must have achieved compliance with the USAREUR Noise Management emission goals. Compliance is achieved in the following manner (see Figure 6-2):

#### **1. Noise Assessment**

a. Within \_\_\_ months of enactment of this policy, Commanders must perform a noise assessment of activities. Noise assessments will normally be performed for any facility containing any of the following noise sources: firing range, LTA, airfield, motorpools, tank parks, heavy generators, heavy air conditioners/refrigeration equipment. This assessment will monitor normal activities at selected boundary points using specified measurement procedures (procedures to be developed).

b. Format of Noise Assessment: The noise assessment should be prepared according to the format in Appendix \_ (to be developed).

# SCHEMATIC OF NOISE ASSESSMENT PROCESS



## 2. Evaluation and Waiver Process

The Noise Assessment will disclose areas where noise goals are being met, and areas where they are not being met. Commanders have the following responsibilities (see Figure 6-2):

a. For areas where goals are being met: No action required; however Commanders are reminded to ensure that practices of complaint management and problem solving efforts as identified in Sections III still apply.

b. For areas where goals are not being met, but where the noise extends into vacant, agricultural, or primarily industrial areas the commander should aggressively pursue installation interests with German governments to maintain these areas in land uses which are not noise sensitive.

c. For noise sensitive areas where goals are not being met:

(1) The commander should take reasonable steps to achieve the noise emission goals that are consistent with mission and readiness requirements. If goals can be met with minor operational changes, the changes made should be noted as a supplement to the noise assessment report. No further action is required. [SEE NOTE 4]

(2) If goals can be met without risk to mission, but if actions to achieve compliance requires significant expenditures of time and/or money (e.g. requires construction of noise barrier wall, etc.) the commander should notify the UMC and request a time extension waiver. The request should contain:

(a) description of the situation

(b) efforts to achieve goals, noting time and money required, time schedule and milestones,

(c) any USAREUR assistance required.

USAREUR will issue a waiver, and will monitor performance. [SEE NOTE 5]

(3) If goals cannot be met without risk to mission or compromising readiness the Commander should request a waiver from HQ,USAREUR. The request for waiver should present the following information:

(a) description of the situation, impacts upon the German population, level of current community controversy about noise

(b) efforts undertaken to achieve goals,

(c) mission requirements that necessitate a waiver, impact on mission of full compliance.

(4) HQ, USAREUR will evaluate the request, and approve, conditionally approve, or disapprove it. [SEE NOTE 6]

(a) If approved, the presence of a Mission Essential Noise Area will be defined; this designation will be coordinated with the FMOD, and political support for the activities undertaken there provided from the HQ level. Training and other activities that take place within such areas will not be expected to meet USAREUR noise management goals; however, commanders should take steps to ensure that feasible noise management measures are undertaken. [SEE NOTE 7]

(b) If conditionally approved, special conditions will be attached with the waiver which call for additional mitigation or planning to take place. Once again, the presence of a special mission essential noise area will be acknowledged.

(c) If denied, the Commander will be required to comply with the noise emission goals.

### 3. Training Exercises Conducted on Army Assets

Commanders will ensure that all training exercises conducted on Army assets have been evaluated to ensure that they meet noise management goals (see Figure 6-3). Occasionally mission and readiness requirements will necessitate training situations that are special, and which have the potential for exceeding noise management goals for those areas that have not been defined as mission essential noise areas. In these situations the Commander should:

- (1) Ensure that the exercise planners have eliminated as much noise as is possible,
- (2) Request a waiver from the UMC, following procedures described in IIB1-2,
- (3) Notify the local German government of the "special" situation.

[SEE NOTE 8]

### 4. Planning and Design of MILCOM Facilities

Commanders will ensure that noise emissions associated with structures and facilities are identified early in the planning and design process, and that appropriate noise emission controls are included where such emissions would conflict with pursuit of noise management goals.

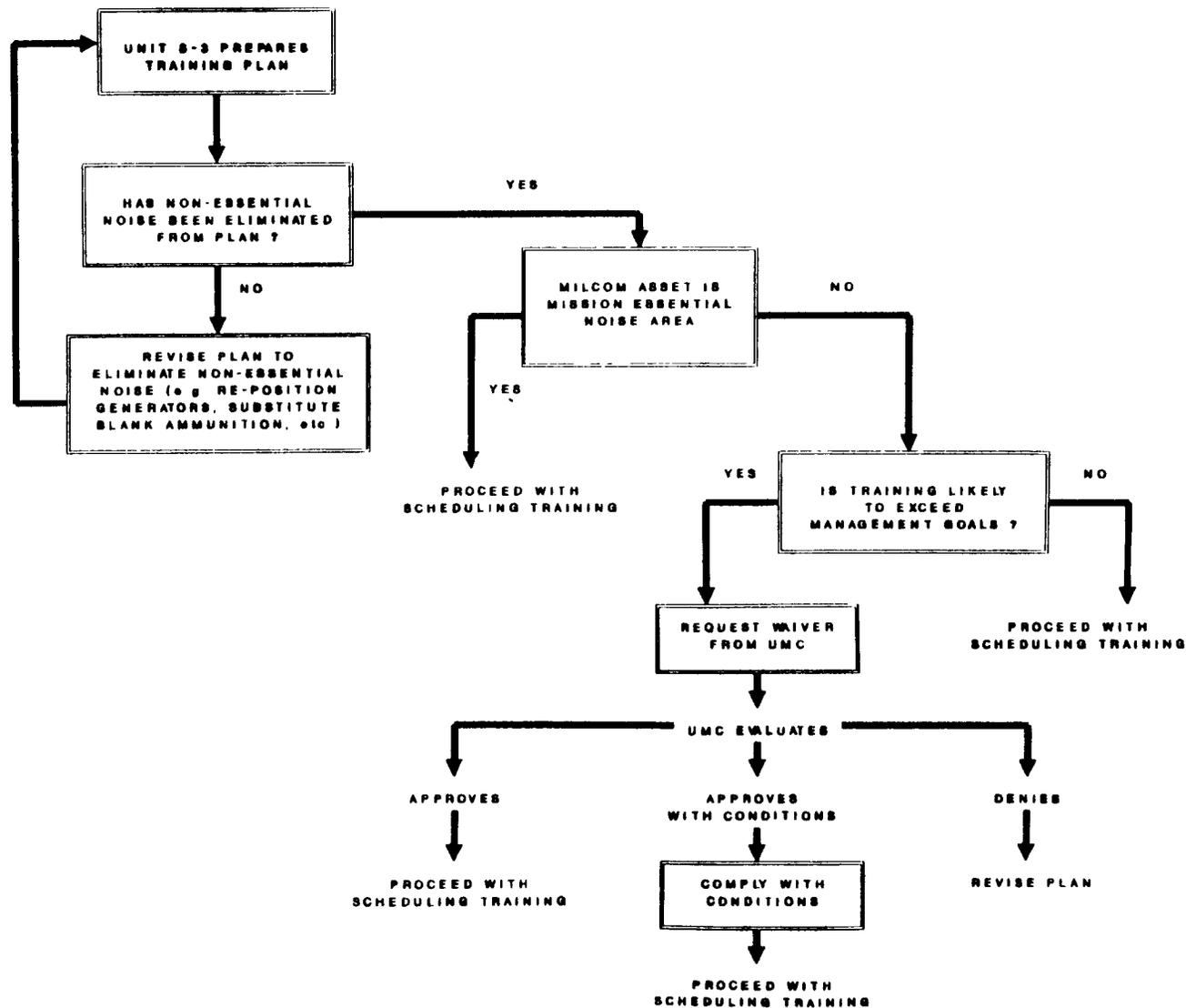
### 5. Tactical Units

Commanders will ensure that all training activities being planned comply with noise management goals established in this policy. Training that is to be conducted on MILCOM facilities that is deemed to be mission essential and which would exceed goals should request a waiver.

[SEE NOTE 9]

FIGURE 6-3

# SCHEMATIC OF PROCEDURE TO TRAIN ON MILCOM-OWNED ASSETS



Commanders will ensure that all incoming personnel and dependents are briefed on USAREUR noise management policies.

### **C. Training and Exercises In Maneuver Rights Areas**

Commanders utilizing MRAs for training and exercises will ensure that the noise impacts of training plans are assessed by the appropriate Maneuver Rights Coordinator. The Maneuver Rights Coordinator will ensure that all training in MRA is conducted so as to minimize noise.

## **III. Public Interaction Component**

### **A. Noise Complaint Management**

Noise complaints will be handled in a prompt, courteous manner. Commanders will ensure the following:

- (1) Noise complaints are referred to the PAO within the MILCOM.

[SEE NOTE 10]

- (2) A standard complaint form is used to record information about the complaint.

- (3) Adequate public notice is provided so that German citizens know where and how to make complaints.

- (4) Complaint data are maintained, and used in the preparation of a yearly noise situation report (see Noise Situation Report).

- (5) Responses are made to complainants in a prompt fashion.

- (6) Appropriate steps are taken to address the substance of the complaint.

### **B. Coordination and Problem Solving with German Governmental Agencies**

Commanders will ensure that local German governmental entities are kept fully informed of noise management initiatives and efforts.

Commanders are encouraged to establish a forum to involve German agencies in a problem solving process to seek solutions to noise issues confronting the MILCOM. Care must be taken to note that the development of solutions that pertain to noise problems associated with mission-essential activities are advisory in nature, and that all decisions about changes in operations for mission related activities must be approved by HQ, USAREUR.

### **C. Concessions/Agreements with German Community**

The commander can use his discretion to develop agreements with the local German community about the management of noise associated with non-mission essential activities (e.g. regulation of morning PT, cadence calling, housing noise, etc.).

Any such agreements made should be documented, and placed in a "Book of Agreements" that should be maintained, and passed on to in-coming commanders who will be required to comply.

The Commander may not make changes because of noise controversy which could adversely affect mission-essential activities. Any requests to change procedures because of noise controversy that involve mission-essential activities should be referred to HQ, USAREUR for resolution, together with any recommendations and discussion that the Commander may feel is appropriate.

#### **IV. NMP Documentation**

A. The Commander should maintain adequate documentation to support the NMP. Such documentation should include:

- (1) The most recent Noise Assessment reports for activities.
- (2) Waivers received for mission-essential activities.
- (3) Plans for achieving noise management goals specified/required by USAREUR, and progress reports toward achievement.
- (4) Noise Situation reports for preceding year.
- (5) Book of Agreements concerning management of non-mission essential noise issues.

#### **B. Noise Situation Report**

Commanders will annually prepare a report on the noise situation as it applies to activities/facilities under their command. This report will address the following:

- Nature of current noise problems facing the activity/facility
- Complaints, issues about noise and their resolution
- Accomplishments in managing noise controversy and issues
- Significant noise controversy threats that need attention
- Plans for the coming year regarding noise management

The Noise Situation Report will be forwarded to Corps for consolidation and forwarding to HQ, USAREUR.

#### **V. Compliance**

A. Compliance with the NMP will be ascertained through the use of periodic audits by a HQ, USAREUR team. The audit team will:

- conduct measurements of noise emissions at facility boundaries,

- inspect NMP documentation,
- inspect progress being made to achieve plans, special conditions imposed for waivers.

B. Audits may be of two types:

(1) Assistance Audits. Commanders may request audits at any time to assist them in the management of their NMP. Results of such audits will be used only to provide information to the commander.

(2) Compliance Audits. Formal reports will be made to HQ, USAREUR.

[SEE NOTE 11]

### **Roles and Responsibilities for the NMP**

In order for the NMP to be carried out effectively, several new roles must be created. In some cases these roles will require the full-time commitment of a person. Roles have been created at each major organizational level within USAREUR (Figure 6-4).

#### **HQ, USAREUR**

##### **Special Assistant to the Chief of Staff for NM**

The Special Assistant is the most important and fundamental role to the success of the NMP effort. The person filling the role is the spark plug and catalyst for the program. The role should be a full-time position, and should be at a grade level commensurate with the type of duties described below, and on par with the type of people with whom the Special Assistant would be interacting.

The position should be established for a three year time period in order to initiate the program. After this period of time the position should then be re-evaluated. When the program has been firmly established, and is running smoothly, it should be possible to eliminate the position, or merge it into DCSOPS.

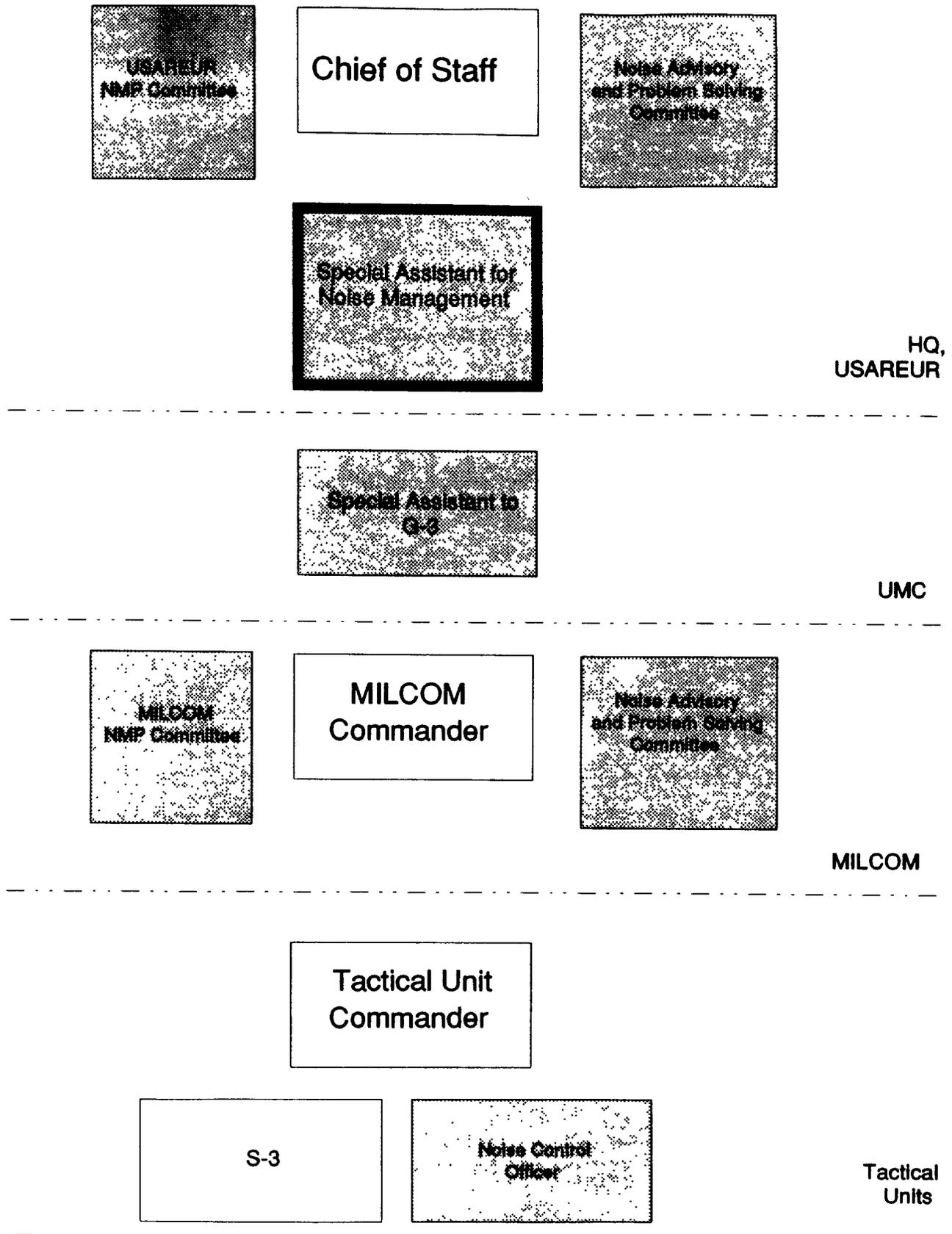
[see NOTE 12]

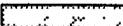
##### **Duties:**

- coordinates all aspects of the USAREUR NMP and ensures that policy regarding noise management is being adhered to
- disseminate information to the field about noise management issues and management approaches
- coordinates with other sending states, and the Air Force, and host nations about NM policy concerns
- chief point of contact for forwarding noise related R&D needs

Figure 6-4

# USAREUR Noise Management Program Roles



 Roles to be created

- member of the HQ Noise Advisory and Problem Solving Committee
- member of the NMP committee
- ensures that HQ policies reflect consistent message regarding noise management (reviews HQ policy for consistency with regard to noise management).
- chief point of contact for reflecting noise management concerns in training doctrine, guidelines and standards that are under development or review as they pertain to USAREUR activities
- coordinates budget for NMP
- manages HQ audit and compliance program
- chairs committee developing noise emission goals

### **USAREUR NMP Committee**

This committee is really the TAC institutionalized. The primary functions of the committee are to iron out policy difficulties so that the command can speak with one voice on NMP policy, and to ensure the vigorous enforcement and commitment to policy within key elements in the headquarters.

Composition: Special Assistant, DCSOPS, DCSENGR, POLAD, DCS Host Nations, Legal Advisor, PAO, Corps Level Special Assistants

Duties: Advise Chief of Staff on content of NMP policy, reach consensus about content of policy; ensure orderly and comprehensive NMP development. Evaluate requests for waivers and decide whether to grant, deny or issue conditional waivers; specify conditions under which a conditional waiver is granted.

### **Noise Advisory and Problem Solving Committee**

This committee primarily provides broader points of view to noise issues being considered. It would be advisory in nature.

Composition: NMP Committee; Air Force; Host Nations; Sending States

Functions: to consider broad issues bearing on noise management and mission capability; to engage in collaborative problem solving about such issues, and formulate advice and guidance to CINC

## **Corps Level**

### **Special Assistant to the G-3 for Noise Management**

The Special Assistant at the Corps level should be funded at approximately 50 % by NMP funds. This role would serve to coordinate among tactical units that are beyond MILCOMS control.

- ensures that USAREUR NM policies are being carried out by tactical units and are reflected in unit plans and training activities
- compiles a yearly report on noise problems and management initiatives in the Corps

[SEE NOTE 13]

### **MILCOMs**

Most of the responsibility for the NMP resides at the MILCOM. The creation of a special role to oversee the program at this level -- to be the Commanders arms and legs so to speak -- would be valuable; however, with the number of communities it would also be expensive. Therefore, the NMP does not call for the creation of any new positions at the MILCOM level. However, guidance could be formulated that advises that the Commander is encouraged to appoint a member of his senior staff to oversee the program -- perhaps the civilian deputy Community Commander.

#### **MILCOM NMP Committee**

Composition: Chaired by Commander or designee; members: DPTS, DEH, PAO, Airfield Manager, JAG, IC

Duties: oversee the NMP at the MILCOM; evaluate potential NM strategies within the context of mission and noise management goals, coordinate among MILCOM elements to ensure consistent approach to noise management.

[SEE NOTE 14]

#### **Noise Advisory and Problem Solving Committee**

Composition: MILCOM NMP Committee, influential German citizens, and representatives from FMOD

Functions: considers issues bearing on noise management and mission capability at the MILCOM; engages in collaborative problem solving about such issues, and formulates advice and guidance about NM

[SEE NOTE 15]

### **Tactical Units**

#### **Noise Control Officer**

- ensure that troops receive a semi-annual briefing on noise control
- implement an annual "Noise Sweep" program

## **Tools to be Developed**

### **Handbooks**

- Managing LTA/Firing Range Noise
- Managing Airfield Noise
- Managing Motorpool Noise
- Reducing Generator Noise
- Planning Training Exercises With Noise Minimization in Mind
- Role of Public Affairs Officer in NM
- Impacting the German Land Use Planning Process
  - Description of how it works
  - "How to" pursue Army interests most effectively
- Effective Management of Noise Complaints

### **Video Briefings - Training Tapes**

- Using problem solving meetings to deal with noise issues
- Cultural factors/differences between Americans and Germans regarding noise for troop briefings
- Video, training materials accompanying complaint handling materials
- Noise Measurement procedures and Noise Assessments

### **Master Planning Materials**

- criteria and design guides for noise walls, generator enclosures

### **Noise Sweep Procedure**

[A good model might be the PM "Comic books"]

Checklist of actions for unit Noise Control Officer to follow/implement.

For example, the guidebook would ask -- Have you got generators? Where are they placed (near to German housing -- could they be moved or re-oriented? what about the availability of community power sources to replace? When are they operated? When is maintenance pulled on them? -- hopefully not during quiet hours, etc.

## **Public Informational Materials**

- Material, and guidelines for instituting a "Flug Watch" program for helicopters modeled off the Air Force program
- Fact sheets, brochures and other materials explaining the USAREUR NMP

## **Noise Audit Procedures**

- Protocols, checklists and procedures

## **HQ Support of the NMP**

### **Resources and Support**

The HQ should make available the services of a noise management consultant firm to do the Noise Assessments called for, and also to provide consultation about technical noise mitigation strategies (e.g. would a noise wall be effective here; are there other less costly approaches that should be looked at?).

### **Political Coordination and Support**

HQ can play an important role in mobilizing high level political support from the FRG (FMOD, OFD) for noise making activities that are deemed to be especially important. The rationale for exercising some deliberation in identifying where it is absolutely necessary that noise be made is to provide a firmer position for FRG involvement. They will be able to say that a process has been employed to select certain areas, and that they support us because some deliberation was involved.

### **Program Incentives**

- on the spot cash awards for innovative noise management consistent with mission capability
- suggestion award program for R&D
- leadership awards for balancing good training with effective noise management
- unit level for passing audits

## **Resources Required to Implement the NMP**

The estimate below is a first approximation of the costs involved in implementing the proposed NMP over the first three years of the program's life. Costs after this period can be expected to be significantly less.

Cost Category ..... Estimated Cost

Salaries (3 years)

Special Assistant to Chief of Staff  
for Noise Management @GS-15/O-5 or 6 ..... 300,000

UMC Special Assistants for Noise  
Management @GS-14/O-5 (50% time, 3 positions) ..... 340,000

Noise Assessments

37 MILCOMs with average of 4 activities  
(firing range, airfield, LTA/MTA, Base Ops)  
to be surveyed; 2 person weeks per assessment.

@Government costs = 175,000; @ Contractor  
costs = 666,000; assume some mix, say ..... 500,000

Audits

6 person days per audit; 37 audits

@Government costs = 27,000; @ Contractor  
costs = 100,000; assume some mix, say ..... 75,000

Program Incentives ..... 150,000

Program Development Costs

IWR costs for tools development ..... 350,000  
Total Estimated Cost (3 years) ..... 1,715,000  
Average per year cost (3 years) ..... 572,000

**Summary**

This chapter has presented the recommendations for a USAREUR NMP. The program does not represent a radical departure from the good management efforts already underway within the command. Rather, they seek to build on these efforts by providing command emphasis, consistent policy, resources and support for noise management. The final chapter addresses the issue of sequencing the development of such a program.

## NOTES TO NMP RECOMMENDATIONS

1. The central policy statement proposes a "cost of doing business" in Germany argument that we heard a number of times -- that is, a recognition of the fact that things are different in Germany, and that in the interest of long term training viability it is important to acknowledge these differences and incorporate them into our plans.
2. This statement re-emphasizes the fact that German quiet hours ordinances and customs apply to U.S. citizens (when engaged in non-duty activities). Our feeling is that aggressively addressing this set of concerns is likely to make a much greater impact on German perceptions than many other things we can do -- it is a "low cost to us, big pay-off" item.
3. The program promotes "goals" rather than standards. Standards are too restrictive given the primacy of the USAREUR mission, and the liberal provisions of the SOFA. Goals imply the possibility of something to work toward, as well as something that can be balanced and traded-off against other important factors.

While there was not unanimity among those interviewed during our data collection phase, many -- including MILCOM executives -- indicated that they would welcome definitive guidelines for dealing with noise issues (see Appendix B for comments). These goals provide the criteria for assessing noise controversy potential, and for acting that many in the field say they need.

As explained in Chapter 5, goals are being advocated to provide a "principled" framework for making decisions. Our feeling is that well-intended, but ad hoc, policies to minimize noise create two basic problems. First, the policy may be an overreaction in some locales. We were cautioned by field personnel during our data collection against making such policies which were felt to unduly tie the field's hands. Second, in the absence of some principled rationale for making a decision, such policies convey the message that pressure and complaints pay off. This seems to us to be exactly the message you do not want to send. Adoption of noise emission goals provide the principled guide for making decisions that can be used to deflect controversy and pressure. As the use of the German noise standards at the Mainz Tank Depot described in Chapter 5 demonstrates such criteria do constrain, but they also do protect.

The general framework of boundary emission levels is similar to the German approach already in use for industrial and roadway noise -- this, we believe, would be a factor in favor of its acceptance by Germans. There is the question of what decibel levels to use for goals -- probably, something very much like German standards in TA Laerm.

Noise emission goals must be acceptable to Operations and others within USAREUR, and at the same time be seen as credible by German noise experts. To achieve these requirements the process of developing goals will need to be both deliberate and careful. The exact process will need to be more development; however, it is likely that the following activities would take place:

- Collect noise emission data from several representative sites, and activities (LTAs, Airfields, Base Operations - Motorpools, etc.)
- Determine if noise emissions would exceed the criteria being proposed
- If criteria were exceeded, identify how training or operational activities would need to be changed to comply with the criteria
- Assess acceptability of such changes to Operations and other affected personnel; modify criteria as appropriate

In this manner it will be possible to work to carefully develop evaluation criteria that "fit" with USAREUR needs. Of course, criteria would also need to be seen as credible by German noise experts, so there could be instances where what trainers and others might be willing to accept would not likely be acceptable to Germans. In such instances, the Mission Essential Noise Area which is explained further in Chapter 6 would enable the Army to sidestep criteria which would overly constrain its training activities.

It should be noted that the above process for developing noise emission criteria can be done without officially involving German authorities. After this preliminary development stage, however, it will be necessary to actively involve German noise experts and convince them of the appropriateness of the goals. While this process would likely involve some negotiation, it need not amount to a "co-determination" of the goals themselves by Germans.

Some in USAREUR are concerned that the goals, though not standards, could become "bottom lines" in the sense that deviations from the goals would generate so much controversy or pressure that they effectively do become standards. To be effective, the goals do need to be taken seriously by Commanders -- they should not be easy to supercede -- hence the somewhat cumbersome waiver process.

However, in some locations, e.g. MTAs, or at any given location during special circumstances, the goals would be superceded because of mission needs. In these instances the Army should be forthright in admitting that the goals will not be met. In such instances the Army should be capable of presenting a more compelling argument to justify its actions by being able to demonstrate that it is making good efforts to achieve its goals, and that the particular instance of deviation has been carefully scrutinized and evaluated.

The process of establishing emission goals is going to take some time. In the meantime, the NMP should move forward with a "start-up" noise program. This program is briefly described in Chapter 7.

4. Tools will be necessary to enable these assessments of the impact of operational changes to be made. The section on tools identifies several handbooks on managing noise that would provide this level of information. In addition, it would be necessary to have expert noise consultation available - this would be provided through HQ support, see the section on HQ Support.

5. The idea behind this process is to move MILCOMs in the direction of pro-active noise management. They will need to develop their own plans to work toward the goals, but USAREUR prods and monitors.

6. Here the recognition is explicit that mission capability is the over-riding interest of the Army, and that there may be cases where noise simply must take a back seat. But again, this is an explicit decision made in a proactive way, rather than something we back into.

7. For such areas USAREUR should be prepared to put its full political muscle to work -- together with that of the FMOD and OFDs -- to go to bat for these areas. For this concept to work, however, it is implicit that there would not be very many of them. Not all training areas would qualify for this special status.

8. Here again the tools to enable planners to determine whether their training exercises would pose a problem with respect to noise goals will be provided with the handbooks.

9. S-3s of tactical units are a logical target for training in planning training exercises taking noise into account. However, since this is a position with a high turn-over rate, units would have to rely heavily on UMC Special Assistants for advice.

10. The PAO is listed as the designated point of contact for noise complaints for several reasons. First, PAOs have the necessary German language capability to field complaints competently. Not all other offices have this capability. Second, PAOs, by virtue of their training in communications are more likely to have the sensitivity to handle complainers effectively -- i.e. in such a way as that the complainer feels that he has been listened to, and treated with respect. Third, as a member of the Commander's staff, PAOs can alert Commanders to emergent noise situations quickly, and as a clearing house for all complaints, they are likely to be able to see any "big pictures" that emerge out of disparate, individual complaints. Finally, the PAOs at many MILCOMs already perform essentially the duties described in this section, and were achieving good success. Our recommendation simply builds on what is already occurring.

11. We envision an audit team comprised primarily of contractor personnel managed by HQ; however, 10th MEDLAB and/or AEHA personnel could also be used subject to availability..

12. Noise management is not primarily an engineering issue. It is primarily a matter of mission preservation. Because of its centrality to mission, it is vital that those with the most "stake" in mission preservation have significant ownership and responsibility for managing the program. Therefore, the NMP establishes its major control through Operations channels.

Parts of noise management do involve technical, engineering input. Noise measurement and evaluation of technical fixes for noise problems are obvious examples of such requirements. However, these are technical functions that need direction within the overall context of needs and requirements that should be established by those responsible for carrying out the principal mission of the Command. The noise management programs of the Air Force and Navy have recognized this fact, and have given the overall responsibility for

program execution to Operations. Similarly, in USAREUR MILCOMs, most of those directly involved with noise management are those in the operational areana -- airfield managers, LTA managers, Plans and Training coordinators, etc. These individuals already recognize that the issue is too important to their own area of responsibility to simply treat it as someone else's problem.

A good analogy is the construction of training ranges. While sophisticated, electronic ranges require significant engineering input, the overall design and operational requirements of the range are based on Operations, not engineering, needs. To make sure this is the case, Operations exercises the control and responsibility for the range, not engineering.

In the case of the NMP the responsibility for the management of the program must come from Operations which should direct the program to achieve operational mission requirements. Engineering should provide the necessary technical support, just as the PAO, and other specialists can provide necessary technical input.

13. The Corps special assistants could be located at the Corps, or they could be located with the Special Assistant at HQ. If the latter were the case they could also function as staff to the Special Assistant.

14. This committee would function like an installation planning board, and would ensure that internal communication about noise issues took place.

15. Many MILCOMs already have this in place within the structure of their CRAC.

## Chapter 7

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### Sequence of Development

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This chapter addresses the issue of getting started with the NMP. In a sense the program is already under way, since the series of briefings and visits to Corps and MILCOMs has served to broadcast USAREUR intentions about a NMP.

As development progresses there are several issues to be managed:

- there is a need to build and maintain consensus and resolve at USAREUR about noise management;
- there needs to be coordination with German agencies, and with other sending states before NMP policy is finalized;
- there is a need to move quickly.

These issues can be managed most effectively by creating the position of Special Assistant at HQ immediately. The Special Assistant can then begin to work to manage the development of the program. As policy is being finalized within the command, and in coordination with German agencies, and other groups, work on the development of the tools to assist the program can proceed.

In the interim when policy is being finalized, and tools developed, the Special Assistant can operate a "start-up" noise program. The essential components of such a program are identified below.

**Time: 0**

**Action: Program Initiation**

- Create Special Assistant position and fill it
- Initiate coordination to finalize NMP policy and procedures
- Initiate development of tools and training packages
- Initiate development of "Noise Sweep" procedure
- Initiate development of noise emission criteria and measurement process

**Time:** 1 mos.

**Action:** Issue Command Letter

Prepare a guidance letter to be signed by the CINC which clearly states that effective noise management consistent with ensuring mission capability has become a command goal. The letter would stress that commanders should try to ensure the following in their units:

- try to limit training and operations which occur on German holidays, weekends, during night-time, or quiet hours -- once again, consistent with mission requirements;
- ensure that early A.M. cadence calls do not impact on German housing areas;
- ensure that noise complaints are dealt with in a timely and courteous fashion.

In addition, the letter should announce that the development of the NMP is underway, and that the position of the Special Assistant has been created, and the duties that this position will have. In addition, a basic time schedule for the development of the NMP should be presented.

The letter should also outline what the Special Assistant can do for MILCOMS and units, e.g.:

- provide expert consultation on noise management problems being encountered
- raise noise management issues of command-wide significance at the Headquarters

**Time:** 6 mos.

**Action:** Declare an "Environmental Week" in Germany with the first topic to be noise

This could serve to focus attention on the new NMP being developed, and to provide initial guidance/emphasis.

- require units to perform the Noise Sweep and report results to UMC/HQ,USAREUR
- sponsor competition/awards for effective noise management actions

**Time:** 12 mos.

**Action:** Issue Formal Policy

Issue NMP policy in form of a USAREUR regulation

### **Summary**

This chapter has addressed the issue of moving ahead with the NMP. The key to effectively proceeding with the program's development is the creation and filling of the Special Assistant for Noise Management position. The sequence of activities described in this chapter would help raise the profile of noise management in the command and move the program forward in rapid fashion.

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**Appendix A**

**Noise Problems and Operational Changes at USAREUR MILCOMS**

## APPENDIX A

### CURRENT NOISE PROBLEMS

#### AIRFIELD/AIRCRAFT OPERATIONS:

##### Heidelberg

Aircraft run-ups at 0600 near a German tennis court cause complaints. Approach and take-offs generate complaints from Plankstad.

##### Kaiserslautern

The Kaiserslautern MILCOM includes two Airforce Airfields, Sambach and Ramstein. Both of these airfields host tremendous aircraft traffic. The Airforce has good public relations with the community. Increasing the number of helicopters stationed in Landstuhl from 2-3 to 15-16 is still in the master planning stages but may create a problem.

##### Karlsruhe

They have no problems. Three choppers are stationed here and these are used for VIP transport. The airfield is used mainly for gathering weather data. This is a large airfield and some high rise apartments are located adjacent to this facility. No complaints have been received.

##### Mannheim

They have received complaints, from those near the airfield, about operations, take-offs, and landings. Also maintenance of helicopters involves hovering to move them around which generates noise and resultant complaints.

##### Pirmasens

One airfield exists, hosting only rotary wing operations for transport. Five helicopters are stationed here. The aircraft operations have been a small source of annoyance in the area.

##### Rheinberg

They have received complaints about helicopters which use fields because no airfield exists. NATO aircraft are a source of noise annoyance.

##### Worms

A helicopter landing area exists at Tauckunnen Barracks for VIP transport. No complaints have been received.

#### OPERATIONAL CHANGES :

##### Heidelberg

They no longer fly on German holidays to perform maintenance and training. They altered approach and climb patterns to create "no fly" areas over the city of Heidelberg. They allow only limited "run-ups".

##### Kaiserslautern

The Airforce decreases flyovers after 1700 and flies only mission essentials after 2000 hours. They also make announcements in the local paper when more than normal flyovers can be expected. The helicopter stationing plan must complete an approval process.

##### Karlsruhe

None

##### Mannheim

They have altered approach and climb patterns and have specified hours for operating and for maintenance.

##### Pirmasens

None

##### Rheinberg

None

##### Worms

No information provided.

## **AIRFIELD/AIRCRAFT OPERATIONS:**

### **Zweibrueken**

The Airforce is the biggest noise source in the area. A helipad at a sportsfield on Kreuzberg Kaserne was a source of one or two complaints. The other helipads are used only for VIP transport and the take-off and landing patterns are over agricultural property.

### **Grafenwoehr**

They have some chopper problems.

### **Hohenfels**

They have some problems with airfield operations.

### **Bad Kreuznach**

There are very few problems associated with the airfield. Two homes are located nearby, however, operations are remote from them. Noise problems associated with air operations generally take place outside the BKs operations envelope.

### **Baumholder**

Noise is not a major problem during maneuvers although there are serious incidents every once in a while. The average noise impact is a minor complaint factor based partially upon low flying aircrafts.

### **Darmstadt**

They have had complaints about noise from aircraft hovering and operations as well as complaints about German and American flying clubs that use the facility on weekends.

### **Frankfurt**

The new development in the town of Bonames has occurred. Residents of apartments, recently constructed, have complained that noise is keeping their children from going to sleep (2000 hrs.). Truck traffic to and from airfield must go through Bonames. This creates noise and congestion complaints. A recent tactical exercise generated complaints when the air unit from Hanau used the airspace for maneuver area.

## **OPERATIONAL CHANGES :**

### **Zweibrueken**

The Helipad at the sportsfield is used only for emergencies.

### **Grafenwoehr**

Overflights are restricted

### **Hohenfels**

Chopper flights are restricted to 3,000 FT until one quarter mile inside.

### **Bad Kreuznach**

No run-ups are allowed before 0600 and the airfield shuts down after 2330 and on German holidays.

### **Baumholder**

No information provided.

### **Darmstadt**

Their compass check point has been shut down because of noise complaints. Pilots must now use Wiesbaden or Fenton to check out compasses. They have restricted night training. If they could they would double the amount of night training they are now doing.

### **Frankfurt**

They do not hold training flights on German holidays, weekends, during quiet hours, or after 2400 hrs. They do fly missions but have to obtain written approval from V Corps. Most of these flights are V Corps staff trips. They take noise sensitive areas into account in all approach and climb patterns at the airfield and pads at Abrams and Drake Kaserne. They have adopted landing approaches from the Fly Neighborly program which involves coming in high and making a sharp descent.

## **AIRFIELD/AIRCRAFT OPERATIONS:**

### **Fulda**

Residents of Sickles and Neuenberg communities complain about helicopter flight operations; particularly hot refueling operations; and hovering and circling at airfield.

### **Glessen**

None

### **Hanau**

The planned stationing of a unit at Budigen has generated complaints and pressures to reconsider the decision.

### **Mainz**

Finthen Army Airfield traffic patterns cause recurring complaints from the local populace. Complaints are received about helicopters flying at low altitudes and outside flight patterns. Other helipads within the MILCOM are not located at the Finthen airfield.

### **Wiesbaden**

Controversy has held up the stationing of helicopters and simulator construction. Complaints have been received about noise coming from the Wiesbaden airfield.

### **Wildflecken**

No information provided.

### **Ansbach**

No information provided.

### **Aschaffenburg**

They have no problems because the airfield is not used.

### **Augsburg**

Flak Helipad receives a few complaints. The primary operator is the 236th Medical Detachment. MEDEVAC missions require them to fly at all hours. Some complaints were found to be caused by German Helicopters using the Augsburg Central Clinic helipad located .5 km away. They have no complaints from Gablingen Helipad.

## **OPERATIONAL CHANGES :**

### **Fulda**

They follow USAREUR flight operation procedures.

### **Glessen**

No information provided.

### **Hanau**

No information provided.

### **Mainz**

A working group has been established by the city of Mainz to discuss disturbances caused by American helicopters in the communities and to look into present flight routes to and from the Finthen airfield.

### **Wiesbaden**

They have altered approach paths to make use of Autobahn corridors and have changed run-up sites for C-12's. Flights are not scheduled between 2200 and 0700 or during the quiet hours 1300-1500 daily (unless essential). They changed flight routes and aircraft operations where possible.

### **Wildflecken**

No information provided.

### **Ansbach**

No information provided.

### **Aschaffenburg**

No information provided.

### **Augsburg**

Flight patterns have been altered to avoid certain communities such as Gerstophen. They expect complaints to come next from Stettenhofen.

## **AIRFIELD/AIRCRAFT OPERATIONS:**

### **Bad Toelz**

They have a small operation with generally no problems. Each August Bad Toelz hosts the NATO parachute competition which requires extensive amounts of helicopters and flight time into the evening hours. People complain about the noise. A weekend sport parachute club using both fixed wing and rotary wing aircraft create noise problems. They have no mission related noise problems.

### **Bamberg**

None

### **Goeppingen**

Flight hours are a problem. Helicopters and jet aircraft often fly after hours.

### **Heilbronn-Schwabsch Hall**

Heilbronn does not have an airfield. The only problem with noise was coming from Schwabsch Hall, a sub-installation. The Lt. Col. at Schwabsch Hall said that he didnt think they had much of a noise problem. He stated that most (96%) of all aircraft noise complaints came as a result of pilots flying into the area and not observing established regulations. He also said that they receive complaints about jet noise even though they have no jets.

### **Munich**

Not Applicable

### **New Ulm**

They currently do not have an air mission and do not have a problem in this area. However, they are concerned that when the Pershings move out, the replacement unit will come with its own air unit.

### **Nuernberg**

Problems stem from night training at low altitudes and quiet hours activities.

## **OPERATIONAL CHANGES :**

### **Bad Toelz**

No Changes

### **Bamberg**

No information provided.

### **Goeppingen**

No flight operations are allowed before 8 AM or after 10 PM unless night flights are required. They work with the community to avoid funerals and other out door activities

### **Heilbronn-Schwabsch Hall**

The Lt. Col. said he has been there 6 years. During that time they have made 3 operational changes. These consisted of changing flight patterns into and away from the facility as well as take-off and landing patterns. He said that recently The General issued a statement that there would be no flying on weekends unless he gave specific permission. There have been no weekend flights for some 6 months. The mission has not suffered.

### **Munich**

No information provided.

### **New Ulm**

Not Applicable

### **Nuernberg**

The solution is to restrict flying in accordance with German quiet hours and PR.

## **AIRFIELD/AIRCRAFT OPERATIONS:**

### **Schweinfurt**

Atmospheric conditions can cause increased helicopter noise at the Gildersheim community of high rise apartments which borders the airfield at corner. Helicopter hovering, night flying (with goggles) till 12 midnight and helicopter interference with TV reception, all cause increased noise problems. Helicopters also blow down young trees.

### **Stuttgart**

The old helicopters near Nelling Bks. take 30 minutes to warm up and this along with helicopter repairs, test runs and flights are a problem. The runway at Echterdingen Airfield is next to a commercial airfield and the army sometimes receives complaints about their take off and landing noise. The public perceives the military as operating under a different set of rules by being able to fly over any area at any time simply by justifying it as critical to their mission, (while private aircraft are restricted from flying over certain areas at certain times). They receive complaints about the airfield generators and many complaints about the flying club, whose largely German membership, has a joint use agreement for the LTA airfield. Formal complaints come from the Ministry of Defense.

### **Wuerzburg**

The PAO said that they have received complaints about the two subcommands with airfields, Kitzingen and Giebelstadt. They produce a constant source of complaints about the increasing air traffic. I was given 20 news clippings about noise from these facilities. However, PAO has documented a 400% reduction since 1981. In addition, DEH thought that there might be problems with the stationing of a new helicopter unit but weren't sure.

## **OPERATIONAL CHANGES :**

### **Schweinfurt**

They closed the flight corridor because of a passion play. They changed flight patterns. Planes can no longer go south of the runway to shut down

### **Stuttgart**

There have been changes in operations reflected in the SOPs generally through reduced hours or changes in flight patterns. Local sub-community commanders have made agreements with neighboring communities.

### **Wuerzburg**

Flight times have been altered and in Kitzingen a citizens action group has formed. Schedules have been altered and flight times are given.

## **LTA/MTA TRAINING:**

### **Heidelberg**

None

### **Kaiserslautern**

Bann Hill is a small enclosed area used for training by the signal people. Along with their communication devices and vehicles a number of generators are also run during exercises. Complaints have been received from individuals residing in the town of Bann located at the base of Bann Hill about generator noise, especially at night.

### **Karlsruhe**

None exists. Training takes place at the major training areas.

### **Mannheim**

While there have been some complaints about noise, the real issue involving the LTA is the belief on the part of the State of Hesse that the US has stolen the area. The 5000 acre tract is very desirable as a recreational site.

### **Pirmasens**

A number of local training areas exist. Noise sources associated with these LTA's are vehicles and generators. These areas are generally heavily wooded.

### **Rheinberg**

None

### **Worms**

They have no problems. Only one LTA exists and it is used for signal operations which make no noise.

### **Zweibrueken**

None

### **Grafenwoehr**

GTA is the major MTA for gunnery. They make a lot of noise but have not had too many problems.

## **OPERATIONAL CHANGES :**

### **Heidelberg**

No information provided.

### **Kaiserslautern**

None

### **Karlsruhe**

No information provided.

### **Mannheim**

They have begun to use spotlights instead of live ammo for training and have an SOP limiting training hours to 2000.

### **Pirmasens**

Noise should be kept at a minimum per SOP and Regulation. This is done by adhering strictly to mission required activities.

### **Rheinberg**

No information provided.

### **Worms**

No information provided.

### **Zweibrueken**

No information provided.

### **Grafenwoehr**

No information provided.

## **LTA/MTA TRAINING:**

### **Hohenfels**

At the HTA maneuver area only blanks are fired.

### **Bad Kreuznach**

They have no problems. Night firing will be coming to the LTA shortly but they expect no problems because of the pro-active management style of the LTA manager.

### **Baumholder**

They have no problems with MTA because it is operated by Germans. Noise is not a major problem during maneuvers and use of LTA's.

### **Darmstadt**

No information provided.

### **Frankfurt**

Frankfurt has an inactive LTA. It was closed some years ago because of safety problems.

### **Fulda**

None

### **Glessen**

Friedberg LTA has experienced no noise problems.

### **Hanau**

Generators in certain locations have created complaints.

### **Mainz**

Tactical vehicle movement to, from and in the local training areas is a major complaint of local citizens.

### **Wiesbaden**

Rheinblick small arms range is the only local training in the MLLCOM.

## **OPERATIONAL CHANGES :**

### **Hohenfels**

No information provided.

### **Bad Kreuznach**

No information provided.

### **Baumholder**

SOP's limit training activities to daytime hours. No maneuvers are allowed in state owned forests during the red deer breeding period. Use of pyrotechnics and blank ammunitions must be approved by and coordinated with Germans. Special care is taken when exercises are held around local recreational areas. Exercise activities are kept to a minimum on Sundays and German holidays.

### **Darmstadt**

No information provided.

### **Frankfurt**

No information provided.

### **Fulda**

No information provided.

### **Glessen**

No information provided.

### **Hanau**

No information provided.

### **Mainz**

They have restricted training to the weekdays from 0700 to 2200 with no training on weekends, German holidays, or at night.

### **Wiesbaden**

No information provided.

## **LTA/MTA TRAINING:**

### **Wildflecken**

Range 9 has problems with Gersfeld and Dalherda.

### **Ansbach**

No information provided.

### **Aschaffenburg**

Currently they have no noise complaints. They may receive complaints when they open the demo bunker in the near future. The old airfield is now used as an LTA for Bradley's maneuver training.

### **Augsburg**

Deuringen SOP's restrict the movement of heavy vehicles after 1800 hrs. on Sundays and on German holidays.

### **Bad Toelz**

The LTA is not a source of noise problems.

### **Bamberg**

Motor pools are close to the local population.

### **Goeppingen**

The LTA is located 45 min. away. They have no track vehicles. Stationing plans and multipurpose range plans were stopped.

### **Hellbronn-Schwabsch Hall**

Representatives from Operations and PAO said that they do not have a noise problem with LTA Training. So few complaints are received that they no longer keep a log on them (only 3 to 5 in the last 12 months). They anticipate a problem if the Pershing Missiles unit is replaced with an artillery unit. This is politically sensitive.

### **Munich**

They have three LTA's. Two are located in Garmisch and have not been used in 15 years. There is a local firing range but it is fully enclosed.

## **OPERATIONAL CHANGES :**

### **Wildflecken**

No information provided.

### **Ansbach**

No information provided.

### **Aschaffenburg**

No information provided.

### **Augsburg**

The demand for the use of LTAs is increasing because of limits on the use of MTAs.

### **Bad Toelz**

Large vehicles are not authorized in the LTA. Units training are briefed on noise issues. They attempt to reduce noise by reducing the number of simulators and blanks.

### **Bamberg**

No information provided.

### **Goeppingen**

No information provided.

### **Hellbronn-Schwabsch Hall**

They schedule training from the center out to keep noise confined. They limit convoy movements at night if there is no valid night training objective. They brief community officials prior to a big training event.

### **Munich**

No information provided.

## **LTA/MTA TRAINING:**

### **New Ulm**

New Ulm has 13 LTA's. They do maneuver training at these and fire blanks. Problems generally come from visiting units after hours. These incidents are few and far between and they feel like they have this problem under control.

### **Nuernberg**

PT cadence calling while running around the perimeter of the site causes problems.

### **Schweinfurt**

The LTA is the primary source of complaints because they train on Sundays and use loud speakers to wake up the troops in the middle of the night for reforger exercises. They also have loud generators. Cadence calling at Bad Kessingen has been a problem too.

### **Stuttgart**

There is a problem with the use of generators at the LTAs. Generally the problems are the result of young commanders not being familiar with the best procedures used to avoid noise impacts such as the placement of generators.

### **Wuerzburg**

None

## **OPERATIONAL CHANGES :**

### **New Ulm**

Scheduling changes have taken place. They have a new SOP and they work hard to insure that not only their own units but also visiting units receive copies of SOPs.

### **Nuernberg**

No information provided.

### **Schweinfurt**

A briefing is given by DPTMS to all visiting units.

### **Stuttgart**

LTAs get very limited use on weekends and holidays.

### **Wuerzburg**

No information provided.

## **FIRING RANGE:**

### **Heidelberg**

Most complaints stem from the Rod and Gun club firing in the evenings and on weekends. People walking in the woods that surround the firing range complain that their enjoyment of the woods is diminished by the noise. A new pistol range is also being planned.

### **Kaiserslautern**

A firing range is located in Landstuhl and complaints have been received. However, these complaints are directed more towards the fact that a firing range exists rather than the noise produced.

### **Karlsruhe**

One 25m firing range exists on Germersheim Army Depot. This is used for qualification only, on the M-16. It is constructed to German Standards and no complaints have been received.

### **Mannheim**

No information provided.

### **Pirmasens**

A 25m firing range and a skeet range exist on the Husterhoeh Kaserne M-16 use.

### **Rheinberg**

Rheinberg has arrangements to use a Belgium range in Duren and a German range in Dinslaken. They do not own their own range.

### **Worms**

None

### **Zweibruecken**

An indoor pistol range exists on Kreuzberg Kaserne. This range is completely enclosed and located adjacent to agricultural property. No complaints are ever received.

### **Grafenwoehr**

No information provided.

## **OPERATIONAL CHANGES :**

### **Heidelberg**

None

### **Kaiserslautern**

None

### **Karlsruhe**

No information provided.

### **Mannheim**

No information provided.

### **Pirmasens**

The army has signed an agreement with citizens of Rodalben agreeing to specific hours of operating the range.

### **Rheinberg**

None

### **Worms**

No information provided.

### **Zweibruecken**

No information provided.

### **Grafenwoehr**

No information provided.

## **FIRING RANGE:**

### **Hohenfels**

No information provided.

### **Bad Kreuznach**

No complaints. The firing range is remote from any development.

### **Baumholder**

A hospital is located 700 meters from a 300 meter range and this causes some problems. They also have a tank range and a 25m indoor range within the MILCOM.

### **Darmstadt**

No information provided.

### **Frankfurt**

No problems

### **Fulda**

None

### **Glessen**

They have no problems with noise at Friedberg firing range. A problem could arise if the range goes to night fire as opposed to its current closing time of 1700.

### **Hanau**

No information provided.

### **Mainz**

Operations are restricted the same as LTA utilization (i.e. day time hours, no firing on German holidays or Sundays).

### **Wiesbaden**

There have been some complaints about the firing range.

### **Wildflecken**

There is a law suit over the proposed up-grade of range 10. They expect problems with the range 23 upgrade to the new machine gun Bradley).

## **OPERATIONAL CHANGES :**

### **Hohenfels**

No information provided.

### **Bad Kreuznach**

They do not fire on German holidays

### **Baumholder**

No information provided.

### **Darmstadt**

No information provided.

### **Frankfurt**

No information provided.

### **Fulda**

No information provided.

### **Glessen**

They allow no firing on Saturdays, Sundays, holidays, or from 1300-1500 and the range closes at 1700.

### **Hanau**

No information provided.

### **Mainz**

No information provided.

### **Wiesbaden**

No information provided.

### **Wildflecken**

No information provided.

## **FIRING RANGE:**

### **Ansbach**

No information provided.

### **Aschaffenburg**

The range facilities have not been a problem because they generally are not close enough to create a noise impact.

### **Augsburg**

The firing range is located at Lechfeld LTA. It is a very insignificant activity relative to the other uses. They have received no complaints. They anticipate that even with increased activity there would not be reason for noise complaints.

### **Bad Toelz**

The local population is tolerant of military range firing activities. However, they do not like the Rod and Gun club coming on weekends and making lots of noise.

### **Bamberg**

Reese Range #6 is experiencing community encroachment by a school for the handicapped, residential property and recreation areas.

### **Goeppingen**

They are not aware of any complaints on the range. The German police have an adjoining range.

### **Heilbronn-Schwabsch Hall**

Personnel at Heilbronn feel that currently they do not have a problem with the firing range. Those who expressed concern were really looking to the future and worried about the type of unit that might replace the Pershing.

### **Munich**

Not applicable because the firing range is fully enclosed.

## **OPERATIONAL CHANGES :**

### **Ansbach**

No information provided.

### **Aschaffenburg**

No information provided.

### **Augsburg**

Not Applicable

### **Bad Toelz**

No operational changes

### **Bamberg**

No information provided.

### **Goeppingen**

Firing times are restricted to 7:30-12:00 and 2:00-10:00 with no firing on German holidays and Sundays.

### **Heilbronn-Schwabsch Hall**

They have experienced operational changes at Heilbronn. These essentially restrict training to certain hours, etc., through SOP's.

### **Munich**

No information provided.

## **FIRING RANGE:**

### **New Ulm**

They don't feel that they have a problem now but their range is being upgraded for machine guns. They anticipate that this will create noise problems.

### **Nuernberg**

A range is located near a university.

### **Schweinfurt**

There is limited weekend firing allowed. The German Reserve uses the range on weekends.

### **Stuttgart**

Small arms fire creates some problems at the range. However, most people are understanding of the need to train. Most complaints are created by the Rod and Gun Club in Nelligen which operates 6 days a week.

### **Wuerzburg**

No information provided.

## **OPERATIONAL CHANGES :**

### **New Ulm**

Firing schedules have been reduced to the hours of 0730-1530. They have no weekend or German Holiday firing. They do open the range for one weekend day a month for recreational firing. German citizens are welcome to use the range during this time.

### **Nuernberg**

Their goal is to build and upgrade "interior" ranges.

### **Schweinfurt**

Firing is limited on weekends.

### **Stuttgart**

Training hours are limited. No training is allowed on German holidays or weekends with the exception of one Saturday each month for units that cannot train during the week. Night firing is limited to that required by regulation.

### **Wuerzburg**

No information provided.

## **BASE OPERATIONS- (MOTOR POOLS, HOSPITALS, ETC):**

### **Heidelberg**

The hospital has a 600 kw generator that needs to be tested under load, although this is muffled. Other generators are not, or are positioned near German housing. Alerts take place at all hours, and during alerts the generators must be started. Also maintenance on trucks or generators can sometimes take place during German "quiet hours" (1300 - 1500). Motor pool operations in the vicinity of tennis courts also generate complaints.

### **Kaiserslautern**

A motorpool on Klaber Kaserne hosting many large vehicles and generators is located adjacent to a German Garden Club and near a high rise apartment building. Complaints have been received regarding the generators running continuously and very loud.

### **Karlsruhe**

Motorpools are the biggest asset for the MILCOM. These host transport, signal, and engineering equipment. Vehicles are run for maintenance checks only except in the case of Reforger exercises. No complaints have ever been received.

### **Mannheim**

The motor pool is in the center of a city, located across from a children's hospital. Normal maintenance procedures, alerts, etc. generate complaints from homes adjacent to the motor pool, as well as from the hospital.

### **Pirmasens**

Motorpools housing vehicles and trucks are located near the center of the installation affecting only U.S. facilities.

### **Rheinberg**

Motorpools are small and scattered. Stationing plans include stationing a large number of wheeled vehicles in dry storage at Reichel Kaserne. They would be run only for periodic maintenance checks. Some citizens are afraid that this will create a noise problem.

### **Worms**

None

## **OPERATIONAL CHANGES :**

### **Heidelberg**

None

### **Kaiserslautern**

Millions of dollars are being spent on trying to clean up hazardous wastes from the motorpool. This is not only environmentally necessary but should improve over all relations with the German public.

### **Karlsruhe**

No information provided.

### **Mannheim**

None

### **Pirmasens**

None

### **Rheinberg**

At this time they are only considering purchasing land adjacent to the Kaserne.

### **Worms**

No information provided.

## **BASE OPERATIONS:**

### **Zweibrueken**

Motorpools are all located adjacent to agricultural property and host only small to medium vehicles, including fire trucks and garbage trucks. No complaints have been received.

### **Grafenwoehr**

No information provided.

### **Hohenfels**

No information provided.

### **Bad Kreuznach**

Rose Barracks and the Hospital Kaserne have motorpools that receive noise complaints because of generators and air conditioner compressors which create some noise problems.

### **Baumholder**

No information provided.

### **Darmstadt**

No information provided.

### **Frankfurt**

Motor pools near German housing and Klein Garten at Drake Kaserne generate complaints. Residents especially want to relax in these gardens but are disturbed by normal motor pool operations.

### **Fulda**

None

### **Glessen**

Generators belonging to the 3rd Infantry Division at Friedberg training facility have generated many complaints during operations exercises run two to four times per year. Generators supply power for troops and equipment participating in the exercises and run 24 hours a day for approximately a two week period.

## **OPERATIONAL CHANGES :**

### **Zweibrueken**

No information provided.

### **Grafenwoehr**

No information provided.

### **Hohenfels**

No information provided.

### **Bad Kreuznach**

Problems have been mitigated somewhat by the construction of noise barrier walls at Rose Bks. The walls were justified partially on the basis of enhanced security in addition to noise protection. They negotiated with the city to get a needed traffic light at Rose Bks in return for building the noise wall.

### **Baumholder**

No information provided.

### **Darmstadt**

No information provided.

### **Frankfurt**

None

### **Fulda**

No information provided.

### **Glessen**

They have repositioned some of the generators to try to reduce noise. They have tried to obtain commercial power but have not been successful as yet.

## **BASE OPERATIONS:**

### **Hanau**

No information provided.

### **Mainz**

Motor pools do not present a problem at the airfield but do present some problems at Lee Bks. during quiet hours. The Mainz army depot operates a motor pool which will soon include a new tank test track and will probably create dissatisfaction in the surrounding communities.

### **Wiesbaden**

Complaints were received about motor pool operations.

### **Wildflecken**

No information provided.

### **Ansbach**

No information provided.

### **Aschaffenburg**

They had a generator and motor pool problem at Fiori Kaserne.

### **Augsburg**

Motor pool vehicle start-ups before 0800 hrs., night-time engine warm-ups, maintenance, continuous vehicle engine noise, and vehicle operations during weekends or on German Holidays cause complaints.

### **Bad Toelz**

No problems with motor pools, etc.

### **Bamberg**

Motor pools are close to the local population.

## **OPERATIONAL CHANGES :**

### **Hanau**

No information provided.

### **Mainz**

No information provided.

### **Wiesbaden**

Motor pool hours of operation were adjusted. Air conditioners, generators and communications repair vans were oriented in a different direction. New air conditioners (a silent type were installed). Shelters and accoustical enclosures were also installed.

### **Wildflecken**

No information provided.

### **Ansbach**

No information provided.

### **Aschaffenburg**

They built a wall around the motor pool and sand bagged the generator. This has solved the problem for the moment.

### **Augsburg**

Start-ups were delayed until after 0830 hrs. Night-time engine warm-ups were stopped. Heavy lift maintenance is now conducted only during daylight hours. A policy letter was issued to restrict the operation of military equipment on German holidays and Sundays.

### **Bad Toelz**

No information provided.

### **Bamberg**

No information provided.

## **BASE OPERATIONS:**

### **Goeppingen**

They generally have no problems except one constant complaint about a generator set up at Galfenberg Gate. One person complained when a unit forgot to put a generator in a different location. A new general wants the canon fired at the 6 AM wake up call (the last general didn't do this).

### **Hellbronn-Schwabsch Hall**

No information provided.

### **Munich**

Complaints were called in about a large exhaust fan which was installed in a motor pool maintenance building at the edge of the Kaserne.

### **New Ulm**

Track vehicles cause noise problems.

### **Nuernberg**

The motor pool vehicle warm-ups have caused complaints.

### **Schweinfurt**

Noise problems are caused by the motor pool on Ledwand Bks. where there are tanks placed near residences and gardens.

### **Stuttgart**

There are noise problems at Wilkens Bks. with the motor pool. Five ton trucks and generators are operated on weekends and holidays. Complaints come in after normal duty hours.

### **Wuerzburg**

Generator noise near a town chapel causes noise complaints.

## **OPERATIONAL CHANGES :**

### **Goeppingen**

No information provided.

### **Hellbronn-Schwabsch Hall**

No information provided.

### **Munich**

The problem was solved by installing a quieter fan.

### **New Ulm**

Noise complaints have caused a rerouting of track vehicles. Some back roads near Wiley Bks. were opened.

### **Nuernberg**

No information provided.

### **Schweinfurt**

No information provided.

### **Stuttgart**

No information provided.

### **Wuerzburg**

The generator was enclosed and they no longer have complaints in the area of base operations.

## **CONVOYS:**

### **Heidelberg**

No information provided.

### **Kaiserslautern**

Complaints which have been received are mainly directed at the danger created when very large vehicles travel on narrow roadways in areas that are densely populated and developed. No complaints have been received regarding noise.

### **Karlsruhe**

Some complaints have been received regarding convoys, however, these have only been about the traffic hold ups and damage, not about noise.

### **Mannheim**

Moving vehicles from the motor pool to a site in Mannheim to the LTA causes noise, dirt and dust pollution.

### **Pirmasens**

Convoys do take place when vehicles are moved out to the training sites. This creates mainly traffic rather than noise problems. This occurs approximately twice per year during major exercises such as Reforger.

### **Rheinberg**

None

### **Worms**

No information provided.

### **Zweibrueken**

Convoys occur very infrequently as in Reforger exercises. Complaints stem mostly from traffic problems rather than noise.

### **Grafenwoehr**

Convoys exit the autobahn and enter the GTA without going through towns although there is still a potential for noise problems.

## **OPERATIONAL CHANGES :**

### **Heidelberg**

No information provided.

### **Kaiserslautern**

No information provided.

### **Karlsruhe**

No information provided.

### **Mannheim**

No information provided.

### **Pirmasens**

None

### **Rheinberg**

None

### **Worms**

No information provided.

### **Zweibrueken**

All military vehicles must use the backgate to Kreuzberg Kaserne which leads through agricultural property rather than the front front gate which goes directly into the city of Zweibrueken.

### **Grafenwoehr**

No information provided.

## CONVOYS:

### Hohenfels

No information provided.

### Bad Kreuznach

Moving equipment to remote training sites creates some traffic noise, however, most of the complaints center on air pollution and congestion.

### Baumholder

The movement of convoys and heavy vehicles is prohibited on Sundays and holidays except for emergencies. Convoys bypass towns and cities where possible.

### Darmstadt

No information provided.

### Frankfurt

Units must run out at least once a month and when this occurs they generate lots of noise and congestion.

### Fulda

They receive complaints about heavy vehicles and trucks that move through Fulda and adjacent communities on the way to the border for regular guard duty or for exercises.

### Glessen

They have few problems except when heavy vehicles are transported via rail to MTAs.

### Hanau

No information provided.

### Mainz

The 4th Brigade Finthen airfield convoys do not present a problem in the area of noise abatement.

### Wiesbaden

No noise related complaints.

## OPERATIONAL CHANGES :

### Hohenfels

No information provided.

### Bad Kreuznach

No information provided.

### Baumholder

No information provided.

### Darmstadt

No information provided.

### Frankfurt

None

### Fulda

None

### Glessen

No information provided.

### Hanau

No information provided.

### Mainz

No information provided.

### Wiesbaden

No information provided.

## **CONVOYS:**

### **Wildflecken**

No information provided.

### **Ansbach**

No information provided.

### **Aschaffenburg**

Convoys have not been a problem. They only convoy to the Rail Head when heading to the MTA. This only happens a few times each year. When they do convoy they follow the SOP, (didn't have a copy available).

### **Augsburg**

Wheel and track convoys create noise and generate complaints about noise.

### **Bad Toelz**

Not Applicable

### **Bamberg**

No problems.

### **Goeppingen**

Convoys are generally not a problem unless they occur during an alert. Most do occur during an alert. Running tanks which wait for one hour or more to be loaded at the rail head create noise and air pollution.

### **Heilbronn-Schwabisch Hall**

They have problems when SOP's are not followed. Also night convoys cause a noise problem.

### **Munich**

Not Applicable

### **New Ulm**

They have had convoy problems in the town of Merklingen. There are 2 ways to reach the LTA through the town or direct access off of the Autobahn.

## **OPERATIONAL CHANGES :**

### **Wildflecken**

No information provided.

### **Ansbach**

No information provided.

### **Aschaffenburg**

No information provided.

### **Augsburg**

Residents are informed of normal convoy hours-0800-1700 hours and once a quarter 0400-0600 for military readiness. All convoys are coordinated with the polizei.

### **Bad Toelz**

No information provided.

### **Bamberg**

No information provided.

### **Goeppingen**

No information provided.

### **Heilbronn-Schwabisch Hall**

They limit night convoys. If there is no valid night training objective they don't do it.

### **Munich**

No information provided.

### **New Ulm**

They route convoys to the LTA off of the Autobahn.

## **CONVOYS:**

### **Nuernberg**

Convoys moving from the site to the LTA must go thru small towns during alerts.

### **Schweinfurt**

At Bad Kessingen they have convoy problems everytime large vehicles move out and must go through the town. This creates constant problems.

### **Stuttgart**

There are problems with the convoys which occur in the middle of the night during alerts.

### **Wuerzburg**

None

## **OPERATIONAL CHANGES :**

### **Nuernberg**

No information provided.

### **Schweinfurt**

A new road is planned on the back side of the town but it will probably be 1995 before it is completed.

### **Stuttgart**

No information provided.

### **Wuerzburg**

No information provided.

## **RECREATIONAL ACTIVITIES:**

### **Heidelberg**

Recreational use of the firing range by the Rod & Gun club generates complaints from Germans walking in woods surrounding the range. Loud noise from barracks, clubs, and from GIs walking with boom boxes also creates complaints.

### **Kaiserslautern**

A number of ball fields and courts exist near the Pulaski Barracks and adjacent to private German homes. Sporting activities are often quite loud and after 1900 hours. Complaints have been received.

### **Karlsruhe**

The Rod and Gun club closed due to lack of funds.

### **Mannheim**

No information provided.

### **Pirmasens**

As mentioned under the heading of firing ranges the skeet range has been a constant source of noise complaints.

### **Rheinberg**

No information provided.

### **Worms**

None

### **Zweibrueken**

A trap and skeet range (25m) is located at Misau Army Depot. This range is built to German standards. Some complaints were received when construction was proposed. It is not located adjacent to housing but firing can be heard from a local German housing area.

### **Grafenwoehr**

No information provided.

## **OPERATIONAL CHANGES**

### **Heidelberg**

Complaints about personal noise are handled on a case by case basis (for example, MPs may tell people to be quiet).

### **Kaiserslautern**

The Commander is establishing a good relationship with these people. All tournaments have been rescheduled to take place before 2000 hours.

### **Karlsruhe**

No information provided.

### **Mannheim**

No information provided.

### **Pirmasens**

Germans plan to build a firing range in the area for their Jogd Club (Hunt Club). It has been proposed that this range be open to use by the Americans and then closing the skeet range on the Kaserne.

### **Rheinberg**

No information provided.

### **Worms**

No information provided.

### **Zweibrueken**

There are some constraints against firing at night time and more have been proposed. These would result in large restrictions on the hours of use.

### **Grafenwoehr**

No information provided.

## RECREATIONAL ACTIVITIES:

### Hohenfels

No information provided.

### Bad Kreuznach

The enlisted club at Rose Bks is the source of most noise complaints. Other sources of irritation have to do with soldiers playing loud music on car radios and boom boxes. Some complaints have to do with soldiers playing basketball late in evening (2200) from adjacent neighbors.

### Baumholder

No information provided.

### Darmstadt

No information provided.

### Frankfurt

Some complaints have been received about stereos being played late at night.

### Fulda

Cadence calling of troops taking PT in morning runs can cause problems at times.

### Glessen

PT cadence calling through the streets of Giessen has produced some complaints as have loud radios played by GIs in leisure activities.

### Hanau

No information provided.

### Mainz

Complaints have been received about firing on Saturdays and Sundays at the recreational skeet range. Also the German Finthen Aero club creates noise complaints.

## OPERATIONAL CHANGES:

### Hohenfels

No information provided.

### Bad Kreuznach

When complaints about the EM club are received a duty officer will personally evaluate the situation. If he feels it is too noisy he will order the club to lower noise. On occasion, they have shut the club. However, they are very reluctant to come down too hard because of need to keep troop morale up. Other noise complaints are responded to on a case by case basis.

### Baumholder

No information provided.

### Darmstadt

No information provided.

### Frankfurt

The duty officer investigates complaints when received and tells persons to turn down the music if he feels it is too loud.

### Fulda

No information provided.

### Glessen

Counsel individual commanders responsible for cadence calling about the need to reduce noise.

### Hanau

No information provided.

### Mainz

Hours have been adjusted to 0900-1700 Saturday and Sunday. The pistol range is only open on Saturday 0900-1600.

**RECREATIONAL ACTIVITIES:**

**Wiesbaden**

None

**Wildflecken**

No information provided.

**Ansbach**

No information provided.

**Aschaffenburg**

No problems

**Augsburg**

One resident complains about noise from the baseball field.

**Bad Toelz**

Complaints have been received about the Rod and Gun Club using the range on weekends and holidays.

**Bamberg**

Some complaints have been received about the Parachute Club plane taking off on Sat. and Sun. at about 10 AM.

**Goeppingen**

They receive complaints about boom boxes and radios being turned too loud.

**Heilbronn-Schwabisch Hall**

Sports activities and calling cadence while doing PT are sources of noise complaints. Also the loud use of radios in open public places has been objected to.

**Munich**

Not Applicable

**OPERATIONAL CHANGES:**

**Wiesbaden**

None

**Wildflecken**

No information provided.

**Ansbach**

No information provided.

**Aschaffenburg**

None

**Augsburg**

Long range plans call for relocation of the field.

**Bad Toelz**

No information provided.

**Bamberg**

No information provided.

**Goeppingen**

They must address each complaint on its own merit and respond in coordination with all involved activities.

**Heilbronn-Schwabisch Hall**

They have posted signs for no cadence calling in certain populated areas.

**Munich**

No information provided.

## **RECREATIONAL ACTIVITIES:**

### **New Ulm**

Many complaints are received because of loud music. This may be from the facility or in German recreation areas. It was specifically mentioned that GI's and or dependents will sometimes take short cuts through German cemeteries carrying their radios turned up loud. This is offensive and disrespectful. Also complaints come in about cheering at sports events and cadence calling.

### **Nuernberg**

The sports field area at the sub-community is at a higher elevation than the town due to filling and this causes the noise to travel into the town more. Noise from the tennis courts has caused complaints from a hospital.

### **Schweinfurt**

The music and theatre facility and club have experienced no recent problems. Bad Kessingen receives complaints about American dependent children playing on German high school grounds. Too much noise at the bus stop has also been mentioned.

### **Stuttgart**

They have received complaints about loud radios both on and off the base. The community club on Wilkins is a source of noise complaints.

### **Wuerzburg**

Complaints have been received about radios playing too loudly.

## **OPERATIONAL CHANGES:**

### **New Ulm**

They developed the 1-2-3 rule. The 1st offense receives a warning. The 2nd offense the offender loses the radio for 30 days. The 3rd offense the offender loses the radio until transferred. They try to make new arrivals in the country more aware of their actions and the impacts their actions have.

### **Nuernberg**

No information provided.

### **Schweinfurt**

They redesigned the theatre and club buildings.

### **Stuttgart**

Policy statements on conduct are published.

### **Wuerzburg**

No information provided.

## **HOUSING/BARRACKS:**

### **Heidelberg**

No information provided.

### **Kaiserslautern**

A small number of complaints have been received from citizens living adjacent to the Klæber Kaserne due to loud music in the barracks.

### **Karlsruhe**

Complaints have been received regarding loud stereos and parties. A community commanders policy letter addresses this issue.

### **Mannheim**

No information provided.

### **Pirmasens**

The housing facilities are located adjacent to highway B10 which is a major thoroughfare running East-West and is heavily traveled.

### **Rheinberg**

All U.S. Army personnel live on the local economy. At Gravenburg civilian personnel housing exists but there are no noise problems.

### **Worms**

A few complaints have been received regarding soldiers with loud stereos in their barracks windows.

### **Zweibrueken**

No problems

### **Grafenwoehr**

No information provided.

### **Hohenfels**

No information provided.

## **OPERATIONAL CHANGES**

### **Heidelberg**

No information provided.

### **Kaiserslautern**

None

### **Karlsruhe**

Soldiers are first given a warning. Second the company commander is informed. The third time the stereo is taken away for a week. So far this has solved the problem.

### **Mannheim**

No information provided.

### **Pirmasens**

None

### **Rheinberg**

No information provided.

### **Worms**

The individual is reminded of the German quiet hour laws by the police.

### **Zweibrueken**

None

### **Grafenwoehr**

No information provided.

### **Hohenfels**

No information provided.

## **HOUSING/BARRACKS:**

### **Bad Kreuznach**

No information provided.

### **Baumholder**

No information provided.

### **Darmstadt**

No information provided.

### **Frankfurt**

No information provided.

### **Fulda**

None

### **Glessen**

Complaints are received from German neighbors about loud BBQs, parties, etc. in US housing areas.

### **Hanau**

No information provided.

### **Mainz**

German residents living opposite the leased apartment building complain about the noise stemming from basketball games.

### **Wiesbaden**

They have received complaints about loud music from dormitories at Lindsey Air Station.

### **Wildflecken**

No information provided.

### **Ansbach**

No information provided.

## **OPERATIONAL CHANGES**

### **Bad Kreuznach**

No information provided.

### **Baumholder**

No information provided.

### **Darmstadt**

No information provided.

### **Frankfurt**

No information provided.

### **Fulda**

None

### **Glessen**

No information provided.

### **Hanau**

No information provided.

### **Mainz**

No information provided.

### **Wiesbaden**

No information provided. They control the source of music.

### **Wildflecken**

No information provided.

### **Ansbach**

No information provided.

## **HOUSING/BARRACKS:**

### **Aschaffenburg**

Loud music and yelling from the housing areas creates complaints.

### **Augsburg**

Loud music from open windows in the barracks creates complaints.

### **Bad Toelz**

Not Applicable

### **Bamberg**

Don't Know

### **Goeppingen**

No information provided.

### **Hellbronn-Schwabsch Hall**

Loud radios disturb the Germans, especially during the quiet hours.

### **Munich**

Not Applicable

### **New Ulm**

Motor pools are noisy. The Army has built military and dependent housing adjacent to the motor pool. Also, plans to install an Air Conditioner at one of the clubs has been objected to on the grounds of noise.

### **Nuernberg**

No information provided.

### **Schweinfurt**

Complaints have been received about barking dogs, loud music and the idling of cars for too long.

## **OPERATIONAL CHANGES:**

### **Aschaffenburg**

No information provided.

### **Augsburg**

Unit commanders issue verbal orders and the problem stops until a new commander arrives.

### **Bad Toelz**

No information provided.

### **Bamberg**

No information provided.

### **Goeppingen**

No information provided.

### **Hellbronn-Schwabsch Hall**

No information provided.

### **Munich**

No information provided.

### **New Ulm**

No comment for part 1. A suggestion has been made to install a noise meter which will shut off the air conditioner if it exceeds certain levels after certain hours.

### **Nuernberg**

No information provided.

### **Schweinfurt**

Policy letters to deal with problem are issued.

**HOUSING/BARRACKS:**

**Stuttgart**

No information provided.

**Wuerzburg**

Complaints have been received about radios playing too loudly and about cars in housing areas.

**OPERATIONAL CHANGES:**

**Stuttgart**

No information provided.

**Wuerzburg**

Residents have been counseled as a result of complaints from German neighbors in the housing area in Veitshoechheim.

## **OTHER ACTIVITIES CREATING NOISE:**

### **Heidelberg**

No information provided.

### **Kaiserslautern**

No information provided.

### **Karlsruhe**

Complaints have been received regarding early morning bugle calls.

### **Mannheim**

No information provided.

### **Pirmasens**

Some complaints have been received regarding soldiers playing music too loud too late in the evening.

### **Rheinberg**

No information provided.

### **Worms**

No information provided.

### **Zweibrueken**

Trailers containing computer systems have noisy generators on the outside. These are more of a hearing conservation problem than an environmental noise problem. They are located in the center of the Kaserne.

### **Grafenwoehr**

The detonation of WWII Bombs of 500 lbs to 1,000 lbs creates a lot of noise.

### **Hohenfels**

No information provided.

### **Bad Kreuznach**

No information provided.

## **OPERATIONAL CHANGES**

### **Heidelberg**

No information provided.

### **Kaiserslautern**

No information provided.

### **Karlsruhe**

Two speakers were shut down.

### **Mannheim**

No information provided.

### **Pirmasens**

None

### **Rheinberg**

No information provided.

### **Worms**

No information provided.

### **Zweibrueken**

None

### **Grafenwoehr**

They try to alert the towns ahead of time.

### **Hohenfels**

No information provided.

### **Bad Kreuznach**

No information provided.

## OTHER ACTIVITIES

### Baumholder

Constantly running generators are a source of complaints.

### Darmstadt

No information provided.

### Frankfurt

No information provided.

### Fulda

Generators used in maneuver exercises generate complaints. Any time a command post is set up complaints about generator noise come in.

### Glessen

No information provided.

### Hanau

No information provided.

### Mainz

Mainz Military Depot is the largest depot outside the US. It is a GOCO operation that creates significant noise from its vehicle test track on which trucks and other heavy vehicles are road tested after being overhauled. Almost the entire perimeter of this facility has had noise barrier walls erected to contain the noise. The facility is run by a German firm and it uses German noise law standards to evaluate noise complaints. Another source of complaints stems from the early morning PT cadence calling during runs outside the installation.

### Wiesbaden

Generators at Kastel storage station and the commissary created noise complaints.

### Wildflecken

No information provided.

## OPERATIONAL CHANGES

### Baumholder

No information provided.

### Darmstadt

No information provided.

### Frankfurt

No information provided.

### Fulda

No information provided.

### Glessen

No information provided.

### Hanau

No information provided.

### Mainz

Noise barrier walls have been erected because of the noise levels associated with test track operations. Noise levels on the outside of the wall do not now exceed German standards.

### Wiesbaden

They changed the hours of operation and found other electrical sources in addition to relocating some of the equipment.

### Wildflecken

No information provided.

## **OTHER ACTIVITIES**

### **Ansbach**

No information provided.

### **Aschaffenburg**

Complaints concerning cadence calling and soldiers leaving bars drunk and yelling have been received.

### **Augsburg**

Generators operating an RTT rig cause high noise levels.

### **Bad Toelz**

The generator used at the airfield creates noise complaints.

### **Bamberg**

PT cadence calling and noisy GI's in town have been a source of complaints.

### **Goeppingen**

The Forest Minister is concerned about the effects of noise on the animals.

### **Hellbronn-Schwablsch Hall**

No information provided.

### **Munich**

They have received one complaint concerning the use of lawn mowers during quiet hours and one complaint concerning noise coming from the air-conditioning units installed on large trucks housing computers.

### **New Ulm**

No information provided.

### **Nuernberg**

No information provided.

## **OPERATIONAL CHANGES**

### **Ansbach**

No information provided.

### **Aschaffenburg**

Cadence calling is restricted in certain parts of the town and during quiet hours.

### **Augsburg**

Sandbag walls were constructed around the generator. Plans call for future hook-up to commercial power.

### **Bad Toelz**

They built a wall around the generator with sandbags.

### **Bamberg**

No information provided.

### **Goeppingen**

No information provided.

### **Hellbronn-Schwablsch Hall**

No information provided.

### **Munich**

PAO put an article in the local bulletin describing the regulation concerning the use of lawn mowers. A small enclosure was built around the area where the trucks were parked.

### **New Ulm**

No information provided.

### **Nuernberg**

No information provided.

**Appendix B**

**Recommendations and Views About the NMP  
Received During MILCOM Fact-Finding Visits**

## **OTHER ACTIVITIES**

### **Schweinfurt**

No information provided.

### **Stuttgart**

Cadence calling is a problem.

### **Wuerzburg**

Zweierweg and Rottendorfer Strasse are streets near Leighton Barracks which are a source of complaints. They receive complaints about the high volume of traffic (both heavy trucks and POVs). Zweierweg is used as a shortcut between Leighton Barracks and Faulenberg Kaserne and is a residential street. There is a debate on the City council as to whether or not to prohibit right turns from out of Leighton Barracks and left.

## **OPERATIONAL CHANGES**

### **Schweinfurt**

No information provided.

### **Stuttgart**

They have produced maps which indicate when and where cadence may be called.

### **Wuerzburg**

There is a debate on the City council as to whether or not to prohibit right turns from out of Leighton Barracks and left turns toward Leighton from the Faulenberg side. This along with prohibiting heavy military trucks would solve the problem. There is a policy letter that prohibits heavy traffic along Rottendorfer Strasse in front of the front gate of Leighton Barracks (policy letter #6-2, 10 Mar 88, part III #3).

## APPENDIX B

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### GENERAL RECOMMENDATIONS/CHARACTERISTICS OF GOOD SOLUTIONS:

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The following recommendations were made during the course of interviews with various personnel conducted at the MILCOMs identified. The recommendations represent the personal points of view of individuals interviewed.

#### **Heidelberg**

- Tell the commanders that complaints do not equate with being anti-American. Noise is irritating and should be taken seriously, but don't overreact. Those who handle complaints, (PAO), are not siding with the complainants. Remember that people get most angry about things that could easily be changed, but aren't.

#### **Kaiserslautern**

- Improve public relations by better management of all Environmental issues.
- Establish SOP's and Regulations in an attempt to regulate unnecessary noise.
- Hire more help in the environmental office. One person cannot handle all environmental issues for an entire MILCOM.

#### **Karlsruhe**

- A good sensitization program should be implemented for all incoming personnel.
- Employ an environmental liason who can work with and be familiar with German environment, laws, and issues.

#### **Mannhelm**

- Need to keep internal communications open so that project a consistent message. Have a policy -- if give something up, expect to get something in return. Push FRG departments to speak up for us and make local governments understand situations and constraints.

#### **Pirmasens**

- Institute a training program for incoming personnel making them more aware of German culture and environmental issues.
- Environmental issues should be considered before choosing the lowest bidder in projects.

- Activities and facilities on the installation should meet German environmental regulations.

### **Rheinberg**

- A program should include Airforce and NATO activities.

### **Worms**

- The German noise experts must agree on a standard of measurement and the averaging technique should be eliminated.

### **Zweibruecken**

- Recommend R & D on muffling the generator on the computer trailer.
- Realize that the 21st SUPCOM is different in that it does not have large noise making equipment.
- Policies should be general.

### **Grafenwoehr**

No recommendations provided

### **Hohenfels**

No recommendations provided

### **Bad Kreuznach**

- Policies coming from USAREUR should not tie the commanders' hands as to how to deal with situations. Need to train designers at DEH to red-flag issues about noise. Need program to encourage sharing of good ideas, designs, etc.
- Need a simple handbook on mitigating noise from generators, air conditioning units, motor pools. This handbook would provide information on how best to deal with problems, how much relief various strategies would give, and how much common mitigating strategies cost.
- Noise management designs (walls, enclosures, etc.) should be contained in the Installation Design Guide. Each MILCOM is having one of these prepared by contractor through EUD.
- Noise barrier walls can be sold on the basis of enhanced security -- perhaps information needs to be provided as to how security walls can have acoustical features added.
- If USAREUR is serious about noise management, a number of things ought to be done to convey this:

- First, they need to resource the program -- that is, provide the money to really do something about noise problems by dealing with the root cause -- noise too near people. We need money to move the noise sources away from people -- relocating our motor pools and billets to remote sites. If this is going to simply be a words program we can do that too, but not much will happen.
- There is no reason to have major operations on German holidays. It should simply be a cost of doing business in Germany that the US doesn't train on German holidays. Actually, we don't get too much done on those days without the Germans around anyway.
- A policy needs to be developed that says clearly and unequivocally that we do not make operational noise during quiet hours -- period. But in order for this to work the message has to come from USAREUR.
- Put noise on the agenda at the Bde and Bn commanders training course at Vilseck. However, it should be presented by someone who has standing with this group.
- Noise management should also be put on the agenda of the USAREUR commanders conference.
- However, the program should not encourage over-reaction by lower graded officers anxious to please. It's always a good idea to ask what's the worst case over-reaction to a policy that is under consideration for implementation -- there will always be one guy out there who will do this.
- It's probably a mistake to try to build negative reinforcement into the program to motivate compliance. It's a natural tendency to want to tie compliance to OERs or to say that Article 15s will be given for noise violations, but these can often do more harm than good. Measuring performance, and compliance becomes difficult, and can actually reinforce the wrong sorts of behavior -- e.g. covering up noise complaints. Instead of negative reinforcement give the unit something for being proactive that they would like to have. For example, give them free money for needed projects if they institute some aspect of noise mitigation or reduction.
- Operations must really own this program for it to have any real effect -- they are the noise makers, and they pretty much control their own destinies.
- The Army needs to get off the dime about quiet generators; it is hard to understand why we can't develop one when they are available elsewhere. We need to develop a quiet power source for the Abrams tank -- this could be sold on the basis of reduced detectability -- not as much need to run the tank's turbine engine so not as easily detected with heat sensors, etc. Once such a power source was developed it could be generalized to other Army needs.

#### **Baumholder**

- The noise management program should consider noise problems associated with maneuver rights areas as well -- this was not addressed in the briefing.

- The noise management program is not named correctly, it's much broader in scope.
- Many policies that could effectively reduce noise complaints are already in place, they need better enforcement.
- We need to follow German lead in baffeling our firing ranges, and in obtaining quiet generators.
- We need to develop a standard for conducting training and operations that we can base decisions on -- such a standard could be ours, it could be a German standard, or it could be something that NATO adopts. Noise associated with following standard procedures would then become a non-issue.
- We are still in a 1948 mentality regarding alerts, we have ability to identify troop massing well ahead of time, so why have alerts that aggravate the public when they aren't needed? We need to ask what do we gain, and what do we lose?

### **Darmstadt**

- A program needs to be resourced adequately for it to be effective; we have too many programs that expect units to take resources out of their hides.
- Policies should be oriented to where they are needed -- if a MILCOM or unit doesn't have problems they should be left alone.
- Develop a noise problem rating potential based on the type of units assigned, and thier assets -- if the rating is over a certain number the policies apply.
- Noise is a signature and needs to be dealt with as a matter of OPSEC.
- Command influence is needed to make noise control important to individual soldiers and units.
- Standards are needed so that we can evaluate how well we are doing, and whether complaints are valid. Provide the units with the standards, and leave it up to them as to how to achieve.
- Use "common sense" in running operations, e.g. don't fire on German religious holidays -- instead schedule maintenance then, but leave the option open for firing, because in some cases it might be necessary. If it becomes necessary to fire then notify public ahead of time.
- Use German officials to disseminate information -- at least offer them the opportunity to do so.
- Visiting units often cause problems because they don't know procedures -- there needs to be a way to ensure that they are made aware of noise management procedures.
- Incorporate the need to operate quietly as a tactical factor in our training.

- Noise surveys that are done need to be certified by German authorities in order to enhance their credibility with German officials.

### **Frankfurt**

- Get a category code established for noise barrier walls -- this will enable cost data and other requirements to be easily entered into DD 1391 system.
- The USAREUR Space and Planning Criteria book is currently being revised by Master Planning shop; this should have information about noise abatement added. Information should identify such things as number of lineal feet of abatement measures needed per design, cost of abatement procedures, etc.
- A check list of factors to consider in designs -- one of which is noise -- would also be good for master planners to have.
- A working group of community master planners could help package and refine specific master planning guidance/information that would be provided.
- Need an SOP or policy that states that all activities must comply with German noise standards.

### **Fulda**

- Army should not to make promises that it cannot keep; we lose credibility when we do.
- Publicize what the Army has agreed to, and live up to that.
- Work with the German government to make the German public understand why maneuvers and training have to be done.
- New commanders need to be familiarized with what has been gone on before with regard to noise issues, agreements, etc.
- Must be careful how much information Army puts out -- if we begin to do it all the time, the public can begin to demand information and justification for anything the Army wants to do.
- Maneuver exercises should be better coordinated among the NATO forces -- the US often catches the flack for actions taken by others.
- The Army should get quieter generators, the Germans have them, why not the Army?
- Criteria or standards are needed on which to base a noise management program -- enforce these once they are developed.

### **Glessen**

- Lots of problems could be eliminated if local commanders were fully aware of local customs, and called these factors to the attention of the troops with regularity.

- Put firing ranges on LTAs.
- Have policy to encourage the use of noise barriers wherever possible.
- Develop temporary, moveable wall for shielding generators, air conditioners used for temporary operations, alerts, etc.
- Encourage the use of commercial power sources wherever possible in place of generators.

## **Hanau**

- Command influence is needed to take care of "cowboys" who operate aircraft inappropriately.
- Don't make promises we can't keep.
- Institute standard complaint procedures for aircraft complaints to ensure timely response, and that adequate information is obtained to deal with the complaint.
- Educate German public about what we are already doing to deal with noise problems.
- Need an easier way to get sound walls constructed.
- Publish a USAREUR noise management regulation so that it can be enforced.
- Develop good community information program materials to inform the US public about noise issues.
- O-6 or above should deal with German local authorities.
- Push noise suppression from the standpoint of tactical surviveability.
- Appoint a unit noise control officer.
- In considering changes in order to deal with noise issues, should have expert input to help figure out most effective solution.
- Keep options open to train 24 hours a day seven days a week rather than publishing concessions that limit capability. Instead, "train smart" by limiting needless noise in training, and by carefully scrutinizing unit requests to train on weekends, holidays, etc. to make sure that it is absolutely necessary, and not the result of poor planning.

## **Mainz**

- The Technical Advisory Committee should have members from the Corps on it (General Grogan, community commander is moving to V Corps, and volunteered to be on the TAC).
- Policies which are developed need specificity, and a firm rationale that allows "hard" agreements to be reached; if this type of policy is not developed it allows too much interpretation, and leaves the door open for political maneuvering.

- Allow local level the autonomy to work their own problems, but when and if they find they need USAREUR help then USAREUR should provide it quickly and effectively.
- Don't pay so much attention to individual complaints; above all, keep in mind that preservation of mission is the most important component of a noise management program.
- All elements that have something to contribute to noise management should be involved in a noise management program.
- Policies should be consistent across MILCOMs so that communities cannot point out differences.
- Consider Turkey for larger operations rather than Germany

### **Wiesbaden**

- Go public and show what is being done to deal with noise problems, public information materials should have the endorsement of the German FMOD. Have technical demonstrate measurement procedures.
- Make CPTs and senior NCOs responsible for enforcing unit level noise control policies that pertain to German/American relations (e.g. lawn mowing, etc.); have command support to make this enforcement important.
- Be more active in telling Germans what we are already doing to minimize noise.
- Tell Germans why we need to make noise; however, it is much more effective if they are told this by German governmental agencies.
- Make it clear via policy and along the chain of command that noise abatement is not a nice to have, but is a must, and make it a serious rating factor.
- Develop a noise control film to be shown to troops going on operations, much like what is now done with maneuver damages.
- We need to think about the benefits vs. costs incurred by training on German holidays, what do we gain with an extra 10 days versus what cost do we pay in terms of worsened relations, and ability to get things done?
- USAREUR needs a centralized policy regarding noise.
- A program modeled of the Air Force "Flug Watch" should be developed and implemented to deal with Army aircraft noise complaints.

### **Wildflecken**

- No recommendations provided

### **Ansbach**

- No recommendations provided

### **Aschaffenburg**

- Generally recommend good communications with city. Make efforts to work together with the public. Develop a training package to better inform incoming personnel.

### **Augsburg**

- The 236th Medical Detachment provides medical emergency assistance to Germans and American troops and citizens. They frequently take a unit to community functions to explain the use and purpose of the Medevac units. They function similar to Red Cross. People gain a better understanding and appreciation for the units.

### **Bad Toelz**

- Be responsive considerate and use good common sense.

### **Bamberg**

- No recommendations provided

### **Goeppingen**

- Address problems quickly.

### **Hellbronn-Schwablsch Hall**

- Maintained good working relations with Germans. Give them advance notice about upcoming events. Invite public participation when possible.

### **Munich**

- The people in Munich are convinced that they have no noise problems in terms of their activities impacting on the surrounding community. They are concerned about the noise impacting on them from Munich International Airport. The McGraw Kaseme is in the direct take-off/landing path for the airport.

### **New Ulm**

- Be responsive to complainers. Need a single POC for complaints-a liason person with an office in the city-should be a German national and possibly should be the maneuver damage person. There have been problems understanding the legal rights for use of training areas, especially areas that are not frequently used and are subsequently adopted for recreational use by Germans. There is no SOP to deal with this. Need to develop institutional memory. Each new person coming in must learn the job without the benefit of clear guidelines.

- Need to find out what Germany does for training? How do they handle their noise problems? Master Planner and City Planners in New Ulm have good working relationships. The city provides copies of long range plans for the MILCON to make comments on. These are considered in future plans and vise-a-versa.

### **Nuernberg**

- No recommendations provided

### **Schweinfurt**

- Infantry Battalion moving to another Bks.

### **Stuttgart**

- Most of the noise related complaints are a result of activities taking place outside the normal work day. It was recommended that U.S. Forces limit activities during certain parts of the day. Perhaps training should take place only during the normal work day and not at all on weekends. The German army has such limits and therefore the Germans feel that we should too. Direct specific guidelines should be issued from HQ, USAREUR.

### **Wuerzburg**

- PAO said that they must frequently deal with problems that are a direct result of a new commander not being familiar with SOP's. She thinks a major positive step would be to initiate a program for new troops and commanders. Ron Rush has developed a paper that is part of a proposed community commanders briefing book.