MCHB-TS-RDE (40-5f) 4 September 2004

INFORMATION PAPER

SUBJECT: Visual Inspection of Karshi-Khanabad (K2) Airbase, Karshi, Uzbekistan

1. (U) ~~(S)~~ PURPOSE.

a. (U) ~~(S)~~ To provide the Coalition Forces Land Component Command (CFLCC) Force Health Protection (FHP) Officer with feedback from a visual site inspection of K2 Airbase. The CFLCC FHP Officer will use this feedback to support an upcoming K2 Airbase master planning meeting to be conducted on 9 September 2004, with an emphasis on potentially expanding the airbase to accommodate up to 8,000 personnel.

b. (U) The feedback provided by this paper includes recommendations from previous USACHPPMEUR Deployment Occupational and Environmental Health Surveillance (DOEHS) reports of K2 Airbase, the current status of these recommendations, and qualitative information on potential occupational and environmental health threats in possible expansion areas of K2 Airbase.

2. (U) ~~(S)~~ FACTS.

a. (U) The following recommendations were made in previous USACHPPMEUR DOEHS reports of K2 Airbase:

(1) (U) The following controls should be implemented in order to minimize the operational occupational and environmental health risk from air: Areas of identifiable contamination should be avoided if possible. Potential sources of elevated air concentrations should be mitigated by covering with soil or other appropriate measures if desired. Dust masks should be worn during periods of high wind or other conditions that could produce elevated levels of PM_{10}. Active dust control measures should continue.

(2) (U) Continue to monitor all media in order to detect changes from the current baseline conditions, document exposures, and determine the effectiveness of the risk control practices.

(3) (U) The operational OEH risk assessment should be updated as additional sampling data become available.

(4) (U) Radiological Survey. No radiological precautions are required for the general population stationed at Stronghold Freedom. Keep Site 1 as a posted "Off Limits" area. Personnel should not enter the Site 1 area unless required by mission. Ensure that all personnel who enter this area wash hands and tools upon leaving the site. Respiratory protection is not necessary for personnel entering this site as long as dust exposure is controlled.

(5) (U) Ambient Air Quality. Minimize airborne particulate concentrations, particularly dust, dirt, and vehicle or equipment emissions. These methods can include, but are not limited to,

paving or placing rock along uncovered road and trails, aggressively watering down or capping uncovered areas, and instituting policies in order to minimize disturbances of soil (e.g. digging) and traffic along dirt roads.

(6) (U) Drinking Water Quality. Inform personnel that their drinking water is safe for potable and non-potable purposes. This will ensure personnel are drinking adequate amounts of drinking water in order to prevent heat injuries.

(7) (U) Soil.

(a) (U) Minimize digging, particularly in areas known to contain fuel contaminated soil. Continue to prohibit digging without a permit in risk communication efforts, along with recommendations for personal protective equipment when manual digging must be done.

(b) (U) When digging must be done, back fill the resulting hole or trench at the earliest opportunity. If digging is to be done manually, then the following personal protective equipment is recommended:

(i) (U) Half- or full-face respirator with organic vapor cartridge and HEPA filter. The M40 mask meets this requirement. If the M40 mask is used, it is recommended that the cartridge/filter be changed when the digging work is complete so that the mask will be fully functional in case of chemical agent attack.

(ii) (U) Tyvek suit with Saranac coating

(iii) (U) Nitrile gloves (or similar impermeable gloves)

(iv) (U) Rubberized overboots

(8) (U) Asbestos. Manage undamaged roofing tiles in place. Perform any removal of damaged tiles from the 416th AEG vehicle maintenance facility and the CI/FP/JAG gazebo using a licensed asbestos removal contractor. Install non-asbestos roofing material as a replacement material. Seal the asbestos roofing tiles by spray painting the underside of the One Stop Inprocessing gazebo roof to minimize any potential asbestos fiber exposure risk to personnel.

(9) (U) Lead Based Paint. Clean all interior surfaces containing LBP with a HEPA vacuum cleaner, use soap and water to remove dust and peeling paint, collect all debris and cleaning waste in plastic trash bags and dispose of material in accordance with local regulations. Repaint surfaces with interior grade latex paint to cover/encapsulate lead based paint.

(10) (U) Noise Sources. Ban all low level flyovers of the Tent City area. Post all noise hazard areas, restrict access to areas that are known noise hazards to personnel assigned to the work site. Relocate refrigeration trailers parked at the entrance to the DFAC to an area behind the food storage and preparation area (along the interior perimeter road). Post the SSA refrigeration truck area as a noise hazard area, restrict access, and limit time spent in the area. Post the Prime Power facility as a noise hazard area and restrict access as noise levels in this area

can be hazardous and permanently damaging in a very short period of time. Attenuate noise levels generated by the Prime Power facility by erecting an 8-10 foot tall Hesco barrier wall along the internal perimeter of the conex wall, the backside of HAS 18, and the area between HAS 19 and the interior berm.

(11) (U) Future Environmental Monitoring. Continue to conduct periodic respirable particulate ambient air monitoring and VOC monitoring using organic preventive medicine personnel. Coordinate with CHPPM-EUR for equipment, media, and analytical support. Collect passive radon monitors deployed throughout Stronghold Freedom and return them to CHPPM-EUR prior to September 2002.

(12) (U) Risk Communication.

(i) (U) Continue aggressive health risk communication efforts on the environmental threats identified on Stronghold Freedom to ensure personnel are aware of actual threats and appropriate countermeasures. Regular risk communication efforts will compensate for personnel turnover and provide deployed personnel with facts regarding their health, environmental health threats, and efforts undertaken to mitigate these health threats.

(ii) (U) Future Risk Communication. Continue to communicate health risks to all incoming personnel at Stronghold Freedom and provide periodic updates through the chain of command and in public forums (i.e., the post newsletter).

b. (U) ~~(S)~~ The USACHPPM SMART-PM DOEHS Team conducted a visual site inspection (VSI) of the K2 Airbase's potential expansion areas as identified by the installation Directorate of Public Works and the Base Commander. The inspection included the Ammunition Supply Point (ASP), areas from the south fence line to the emergency runway to the North, and the site of the new dining facility (DFAC) (see Appendix A).

(1) (U) ~~(S)~~ There is currently open pit burning on the South side of the fence near the ASP (vic 41S QD 52346 01273). On 1 September 2004, there was one large fire actively burning during the VSI, and on 2 September 2004 there were two smaller fires burning in the same area (see Appendix B, Figures 1 and 2). The smell of burning plastic was evident, and ash was noted blowing from the fire site over the ASP. An ambient air monitoring station measuring total suspended particulate, respirable particulate, polynuclear aromatic hydrocarbons, and volatile organic compounds has been located within the ASP. Results will be available before 1 December 2004.

(2) (U) ~~(S)~~ On 1 September 2004, the DOEHS team conducted a walk through of the current hazardous material/hazardous waste (HM/HW) storage area (vic 41S QD 52153 01404) to the East of the ASP, since ASP personnel identified the storage area as a possible expansion area of the ASP. The storage area was well kept with no evidence of large releases or spills. The containers in the area were in generally good condition.

(3) (U) ~~(S)~~ On 1 September 2004, the DOEHS team conducted a tour along the southern fence line to the limits US Personnel are allowed to travel without special permission from the

Uzbekistan government (vic 41S QD 53842 01637). The area along the South fence is generally rolling terrain with washes or shallow ravines running from North to South. One area along the road appeared to be an open dump (vic 41S QD 53068 00435) (see Appendix B, Figures 3 and 4). There did not appear to be any hazardous material disposed at the site, and direct reading measurements collected with a MultiRAE Plus Toxic Gas Monitor (containing a photoionization detector with a 10.6 eV lamp) did not indicate ionizable gas concentrations above the detection limit. There did not appear to be any other obvious disposal or industrial areas along the South road; however, several small clusters of Uzbeki military buildings (e.g., guard towers) were noted in the area near the road. Previous use of the area is not known.

(4) (U) ~~(S)~~ On 1 September 2004, the DOEHS team toured the area just South of the emergency runway in the area shown in the figure. The area was generally flat and covered with vegetation, and no buildings were noted in this area other than a US military communication facility (see Appendix B, Figures 5 and 6). There did not appear to be any obvious industrial or disposal sites in the area. Previous use of the area is not known; however, cotton may have been cultivated in the area. Three composite soil samples were collected in the areas shown in the figure and will be analyzed for heavy metals, semi-volatile organic compounds, pesticides, herbicides, and polychlorinated biphenyls (PCBs).

(5) (U) ~~(S)~~ The installation engineers conducting construction operations in the ASP identified a cut site (vic 41S QD 52735 02811) located South of the runway (see Appendix B, Figures 7 through 9). On 1 September 2004, the DOEHS team monitored soil at the cut site, as well as soil placed into newly constructed berms at the ASP, with the MultiRAE Plus Toxic Gas Monitor, and no concentrations of ionizable gas were noted above the detection limit.

(6) (U) ~~(S)~~ On 3 and 4 September 2004, the DOEHS team visually surveyed the new DFAC site. No potential environmental health threats were noted using the MultiRAE Plus Toxic Gas Monitor and through visual inspection. An ambient air monitoring station measuring total suspended particulate, respirable particulate, polynuclear aromatic hydrocarbons, and volatile organic compounds has been located near this site. Soil samples were also collected from this site, and results for both the air samples and soil samples will be available before 1 December 2004.

(7) (U) ~~(S)~~ Direct reading ionizing radiation measurements collected with an Eberline E600 Radiac Set equipped with an SPA-9 beta/gamma probe at the ASP, the open dump, the HM/HW storage area, the cut site, and the new DFAC site were all consistent with normal background radiation levels.

Mr[redacted]/MAJ[redacted]
[redacted]

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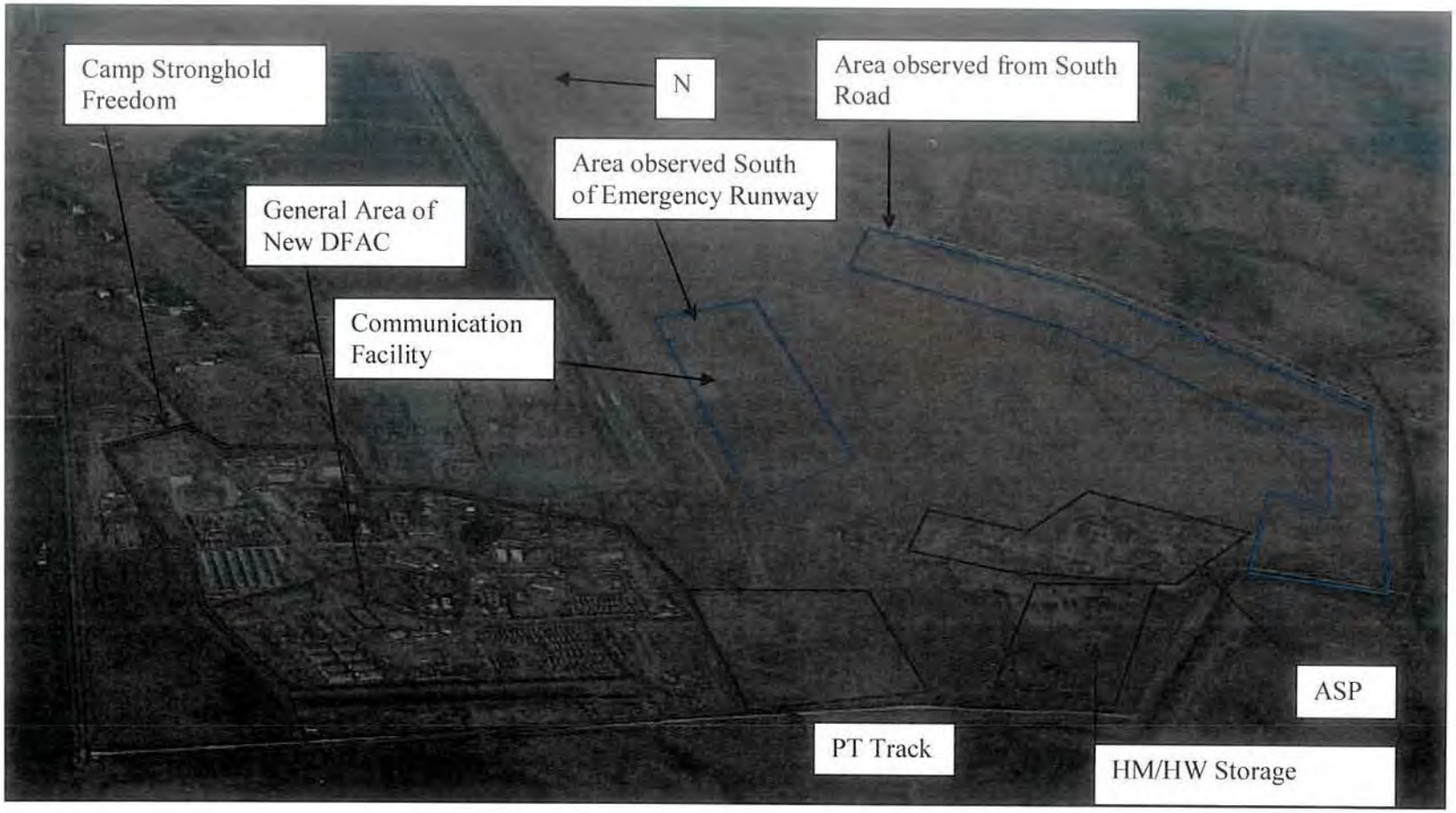
APPENDIX A



Aerial Photograph of Karshi Khanabad (K2) Airbase, Karshi, Uzbekistan

APPENDIX A

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Figure 1. Two open pit trash fires burning South of K2 Airbase Ammunition Supply Point (ASP) (021900DSEP04)

Figure 2. Open pit trash fire burning South of K2 Airbase ASP (021000DSEP04)

Figure 3. View from South Road facing North

Figure 4. Open dump located along South Road (trash, sandbags, construction debris, and HMMWV parts)

Figure 5. View East of the US Military Communication Site (located South of runway)

Figure 6. View West of the US Military Communication Site (located South of runway)

Figure 7. Engineer cut site located along South Road

Figure 8. Air monitoring using MultiRAE Plus Toxic Gas Monitor at engineer cut site

Figure 9. Radiation monitoring on newly constructed berms at K2 Airbase ASP