

**JBLE-Eustis Annual Review of the  
Installation Pest Management Plan  
20 May 2021 – 19 May 2022**

**I. Installation Name:** Joint Base Langley-Eustis (Eustis), Fort Eustis.

**II. Currency of Installation Pest Management Plan (IPMP).**

1.	Does the installation have an approved Installation Pest Management Plan (IPMP)?	Yes. See item VII.1. below.
2.	Date the IPMP received final signature.	5/19/2020. See VII.1.
3.	Are you planning to rewrite/revise the IPMP?	No (updates are noted in Annex A of this review).

**III. Installation Pest Management Coordinator (IPMC).**

1.	Has an Installation Pest Management Coordinator been assigned in writing? Please forward copy of appointment letter to AFSPC Command Entomologist along with this form.	YES. See VII.2.
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**IV. Plan Maintenance.**

Please list any minor changes (i.e. personnel changes, certifications, standard operating procedures, etc.) to the plan for the new Fiscal Year. Major plan revisions require re-staffing and re-submittal of the IPMP.

Approved/functional (see comments VII.1. below). Some minor updates have been noted in Annex A.
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**V. On-Site Assistance.**

Please indicate if you would like a Staff Assistance Visit (SAV) this year and briefly describe the reason for the visit.

A Staff Assistance Visit is scheduled for July 2022.
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**VI. Aerial Applications.**

1.	Are there any projects requiring the aerial applications of pesticides for the upcoming FY?	YES. See item VII.3. below.
2.	Does the installation have an approved aerial spray Statement of Need for the project(s) from the AFSPC Pest Management Consultant?	NO. See item VII.3. below.
3.	Does the installation have the appropriate Environmental Assessment(s) (EA) or Environmental Impact Statement(s) (EIS)?	NO. See item VII.3. below.

## VII. Additional Comments.

1. Current IPMP status. The existing version of the JBLE-E IPMP was signed 19 May 2020 and therefore expires 18 May 2025. A new IPMP must be in effect by this date. IPMPs must be reviewed annually and revised accordingly. The first review was completed in 2021. This review represents the second IPMP annual review since the plan was approved. Several updates were identified, and the specific revised wording is noted in Annex A below. The IPMP (and annual reviews) remains available for access by the installation community by being posted on the JBLE website.
2. Installation Pest Management Coordinator status. DOD installations are required to appoint a staff member to serve as the Installation Pest Management Coordinator (IPMC). IPMCs oversee all aspects of integrated pest management programs. Mr. Timothy Christensen (CES/CEIE) was originally assigned as the IPMC in 2012 by the 733 MSG/CC and remained as such through this annual review period. An updated appointment memorandum was completed in May 2022. Mr. Christensen will continue this role through the December 2022/January 2023 time frame upon which he intends to retire. Mr. James Carr is transitioning into this position with funding requests previously submitted for Mr. Carr to attend the requisite IPMC training in FY 2023.
3. Aerial pesticide applications. No aerial treatments for mosquitoes have been conducted for several years primarily because adult mosquito counts have not exceeded thresholds that would otherwise generate the need. Additionally, no mosquito-borne disease risks have been identified by regional or local public health authorities. Applications of pesticides via aerial platforms remain important tools in pest management when appropriate and when applicable documentation requirements are completed. Some changes at the installation have occurred requiring new Aerial Application of Pesticides Statements of Need (AAPSON) if aerial applications of pesticides against adult or larval mosquitoes were to be considered. This is due to the documented occurrence of the federally threatened Northern long-eared bat (*Myotis septentrionalis*) on JBLE-E in 2016, and the removal of the Indiana bat (*Myotis sodalis*) from consideration on the installation in 2021. Additionally, the black rail (*Laterallus jamaicensis*) became listed as endangered in October 2020 and occurs within the geographical area surrounding the installation (though to date, the black rail has not been observed on JBLE-E.). An Environmental Assessment (EA) is needed to meet these changes. The 633d CES contracted the preparation of an EA to cover both installations which was expected to be completed in CY 2022. The EA was not finished during the IPMP annual review period, and the completion date is now uncertain because the 633d AF/JA - Operations and International Law - Environmental Law & Litigation office did not accept the alternatives articulated in the draft EA. Consequently, JBLE-Eustis was not covered under an EA for aerial treatments for mosquitoes during the review period, and this remains uncertain through the remainder of 2022. As a result, the IPMP is revised to omit aerial application of pesticides against mosquitoes as not an available resource until the EA is completed. Appendix D and M are revised accordingly (see Annex A). This does not affect aerial application of herbicides to

control invasive common reed. Two EAs currently exist for this action. However a new/revised AAPSON for common reed is needed. The IPMC will coordinate preparation of the document with AFCEC/COSC.

4. Red Imported Fire Ants (RIFA) (*Solenopsis invicta*). A new RIFA colony was discovered on 17 Dec 2020 in the Slingload Training Area and Landing Zone (STALZ) area. The site was monitored and bait treatment occurred in March 2021 to be more effective. The colony was monitored following treatment and appears to have been neutralized. It remains uncertain how the colony became established in a remote area of Mulberry Island but is suspected of being brought in by soil used to at the Aviation Complex construction site. During the review period, the installation community reported two possible RIFA colonies. One site was at Training Area 18 and the other location was the vicinity of BLDG 2730. The IPMC investigated and determined that these were not RIFA colonies. To help preclude future infestations, Environmental Management Procedures 4.4.6.16 (Environmental Contracting Special Conditions) was modified to control regulated articles from entering the installation.

5. DOD/VDACS certifications. Tim Christensen (IPMC/CEIE) retains DOD pesticide applicator certification for categories 2 (Forest), 3 (Ornamental & Turf), 5 (Aquatics), 6 (Right of Way), 7 (Industrial, Institutional, Structure & Health) and 8 (Public Health) [AF-252-09-0316] . These certifications remain valid until 31 August 2023. He recertified Category 11 (Aerial Application) in May 2021. This certification remains valid through May 2024. Adam Priestley (CEIE/wildlife biologist obtained Virginia Department of Agriculture & Consumer Services (VDACS) Pesticide Applicator certification (119531-G) in 2020 for Virginia categories 2 (Forest), 3A (Ornamental), 3B (Turf), 6 (Right of Way) and 7D (Vertebrate Species) which expires 30 June 2023. Additionally, Mr. Priestley is scheduled to attend the DOD pesticide applicator course in August 2022. Mr. Carr will attend the DOD pesticide applicator certification and Category 11 courses in 2023. The golf course maintenance superintendent holds VDACS certification for 3A and 3B through 2022. BOS contractors hold certifications in categories 3A, 3B, 5A (Aquatics), 6, 7A (General Pest), 7B (Wood Destroying Pests), and 8 (Public Health) through 30 June 2022. These individuals will complete re-certifications and submit copies of to the IPMC.

6. FY 2021 Measures of Merit (MOM). The FY21 MOM was submitted to AFCEC in advance of the deadline.

7. Mosquito breeding sites & disease pathogen surveillance. Mosquito species surveillance was performed by McDonald Army Health Center (MAHC) Department of Public Health (DPH) staff in June and July 2021. Four mosquito species were identified that had not been documented on the installation previously with these being *Anopheles quadrimaculatus*, *Anopheles crucians*, *Aedes infirmatus*, and *Orthopodomyia signifera*. With this data, a total of 27 mosquito species are now documented at JBLE-Eustis based on surveys performed in 2009, 2016, 2017 and 2021. More trapping is intended in summer/fall 2022. During 2022 Earth Day events CEIE staff participated in removal of improperly disposed solid waste. This involved placement of materials adjacent to dumpsters rather than transfer to the JBLE-Eustis Solid Waste Management Facility. Specific to mosquito breeding, several large black plastic pallets containing rainwater were found at the dumpster at BLDG 820. This would have served as an excellent mosquito breeding resource and had been documented previously when the same materials containing rainwater were found at the Solid Waste Management Facility in 2017. This same condition was observed again at the Facility when the pallets were taken there on 20 April 2022. CEIE advised Facility staff to remove the water and store the pallets in a manner that prevents collection of rainwater in the future.

8. Tick surveillance. Virtually no tick surveillance occurred during the review period due to lack of resources and indirect effects of the pandemic. MAHC DPH and the IPMC are considering creating a new surveillance program by using an Air Force lab or reworking testing by US Army Public Health Command.

9. Biting insect reports. In conjunction with Range Control, standard optional biting insect surveys are provided to military units when reserving training areas. However, no reports were received in 2020-2021 presumably due to the pandemic. However, coordination between Range Operations & IPMC has taken place in April 2022 and use of these reports will resume.

10. Spider survey. The IPMC initiated a formal spider survey program beginning in CY 2020 and continued into CY 2021. A spider species not previously documented on the installation was noted in April 2022 (Arachnida: Araneae: Thomisidae: *Xysticus transversatus*). Base Operations Support (BOS) contract pest control staff continue to provide sticky traps for examination by the IPMC, and spider taxonomy and numbers are recorded. This task in conjunction with other IPMC arthropod inventory work will (a) support documentation that brown recluse spiders (*Loxosceles reclusa*) are not evident on the installation despite frequent contradictions by installation community members and (b) contribute to the arthropod species inventory. As expected, no brown recluse spiders were documented on the installation during this review period. Virginia in general is outside the species' geographical distribution but many unqualified persons continue to suggest their presence.

11. Pest Management Quality Assurance Evaluators (PMQAE). PMQAEs must be assigned for contracts that involve/include pest control. Personnel turnover and the unavailability of the AF's PMQAE online training prevented assigning PMQAE duties to CES staff. New PMQAEs need to be assigned and trained for contracts that include pest control. Ms. Desiree McHan completed the requisite training and is assigned as the PMQAE for the Base Operations Support (BOS) contract. A new individual for the grounds maintenance and the railroad maintenance contracts will be assigned as soon as they complete the training. Additionally, CEIE natural resources/IPM staff have completed PMQAE training and assist Operations FL as feasibly possible.

12. IPM policy/Integrated Vector Management (IVM)/biting arthropod-related education/awareness for the installation community. CEIE staff utilized several forums to educate the installation community during the annual review period regarding nuisance biting and disease vectoring arthropods. Installation IPM policy and tick awareness topics are presented at the Activity Environmental Management (AEM) training classes. Tick Awareness and Reducing Mosquito Breeding presentations were offered as Earth Day events on 19 April 2022; however, no leadership nor installation community members attended. IPM and disease vectoring arthropods topics were presented at Fort Eustis field sanitation courses on 20 October 2021 and 9 February 2022 (and is scheduled for 18 May 2022). IPM policy and tick awareness at Fort Eustis was presented at Newcomers Orientations in 2021-2022. A presentation that included tick awareness and ways to reduce mosquito breeding was provided to the Army Community Service Virtual Spring Break Camp on 6 April 2021. These topics were presented at a Marine Warrant Officer Advanced Course scheduled for 20 August 2021. Additionally, CEIE staff presented related information along with information displays for the 128th Aviation Brigade Safety Day in May 2021 and is scheduled to provide this support again 26 May 2022.

13. JBLE-E Arthropod Inventory. The IPMC published an arthropod inventory originally in December 2018 (Christensen. Insects, Other Arthropods & Other Invertebrates Observed on Fort Eustis: Understanding the Significance of Invertebrate Taxa on Military Missions, 27 Dec 2018). This document was incorporated into the revised JBLE-E Integrated Natural Resources Management Plan (signed/approved by the Installation Commander on 5 June 2019) and the IPMP (signed/approved by the Installation Commander on 19 May 2020). This inventory remains a living document and is updated periodically with the first update completed in 2020 and the second update completed in December 2021. This inventory contributes to natural resources/habitat management including forest management as well as human and wildlife health on the installation.

14. Unauthorized pest control activities. All pest control occurring on the installation must be performed in accordance with the IPMP. This includes having only authorized applicators performing pest control on JBLE-Eustis. The following pest control/pesticide applicators were Alutiiq (BOS contract), Byrd (grounds maintenance contract), CEIE natural resources staff, City of Newport News (Stanford Elementary School), Resource Management Associates (habitat and invasive vegetation contractor for CEIE), Pines Golf Course maintenance superintendent, and contractors performing termite control at the Aviation Battalion construction site. No unauthorized applicators were identified during the review period. The IPMC will propose a control plan to preclude unauthorized applicators from accessing the installation. One military unit had ordered rat poison which is not authorized.

15. Approval of pesticide use in Virginia. The VDACS website, Kelly Solutions (<http://www.kellysolutions.com/va/pesticideindex.htm>), was used to determine whether a given pesticide is authorized for use in Virginia. The system has stopped working several months ago. The IPMC contact VDACS o/a 14 Feb and again on 23 Feb 2022. VDACS indicated an anticipated correction by March but the issue remains.

16. Integrated Vector Management challenges. The JBLE-Eustis IPMP specifies testing of applicable mosquito species for West Nile Virus (WNV), Eastern Equine Encephalitis (EEE) and Saint Louis Encephalitis pathogens as these pathogens are representative of this geographical area and was in agree between McDonald Health Center (MAHC) Department of Public Health (DPH) and CES. DPH is responsible for arthropod disease vector surveillance and had sent mosquito specimens to US Army Public Health Command (USAPHC), Fort Meade, MD; however, USAPHC indicated it would do testing on *Aedes* mosquitoes which are not vectors of the pathogens of concern at JBLE-Eustis. The IPMC discussed this issue with DPC and will explore the possibilities of testing at an Air Force laboratory.

17. Base Operations Support (BOS) contract. The BOS contract includes pest control services and represents the primary pest control organization fir JBLE-Eustis. In the October-December time frame, the CEIE IPMC worked with the Operations FL staff to update/revise pest control components of the contract Performance Work Statement.

18. Enterprise Environmental, Safety, and Occupational Health Management Information System (EESOH-MIS). A pesticide management module was incorporated into EESOH-MIS effective August 2021 replacing the Integrated Pest Management Information System (IPMIS). Several issues were identified and certain actions were taken. Examining the module, the IPMC determined that certain challenges existed. Three pesticide applicators – the BOS contractor, CEIE natural resources staff, and the Pines golf course needed to enter their pesticide inventories and obtain approvals from CEIEE, Safety and Industrial Hygiene. Once accomplished purchase requests needed to be entered by these entities. There were several applicators who cannot get EESOH-MIS access (namely, the grounds maintenance contractor, City of Newport News applicators at Stanford Elementary School, natural resources habitat contractor, termite control applicators for new construction, and railroad vegetation control contractor. The IPMC created accounts for these entities. The IPMC also

designed a comprehensive yet simplified Excel spreadsheet by which all applicators would submit monthly reports. The IPMC could then enter usage data and be able to generate annual MoM reports if the challenges with EESOH-MIS prevented accurate generation of MoM reports. This issue will be discussed with AFCEC at the 11 July site visit.

19. Future considerations.

- Continued cooperative efforts between CES and MAHC DPH on mosquito, tick and associated pathogen surveillance. This is challenged by anticipated personnel turnover for both organizations in late CY 2022.
- BOS contract currently includes surveillance for gypsy moth. IPMC is reviewing to determine if this is necessary.
- Tick warning signage installation at entrances to Training Areas and the Fort Eustis Nature Trail.
- Re-examine BOS contractor equipment calibration.
- Implement forest arthropod surveillance as currently articulated in the IPMP. This will be challenged by personnel turnover expected in CEIE.
- Review and provide input to the grounds maintenance contract Performance Work Statement.
- Continue to pursue opportunities to educate the installation community.
- Ensure the 2022 arthropod inventory update is cross-referenced with the Integrated Natural Resources Management Plan.
- Ensure the Integrated Natural Resources Management Plan Annual Review Summary is cross-referenced with this IPMP annual review.
- Reduce tick-borne disease risks by eliminating tick habitat where feasible. One location that needs routine maintenance is the vicinity of the Military Operations in Urban Terrain and the UOS. In 2021, the vegetation was well over 12 inches in height and grown in thickly. This condition creates habitat for ticks increasing risks of tick-borne diseases to military personnel training at these sites. Herbaceous vegetation at these locations should be mowed routinely throughout the growing season so that the heights do not exceed 6 inches. This task should be included in the grounds maintenance contract.

**VIII. Installation Pesticide Application Points of Contact**

	<b>Base Operations Support Pest Control (contracted)</b>	<b>Base Operations Support Pest Control (contracted)</b>
<b>Name</b>	Mike Parise	Keith Banks
<b>Duty Title</b>	Pest control applicator/technician	Pest control applicator/technician
<b>Office Symbol</b>	Alutiiq	Alutiiq
<b>Street Address</b>	BLDG 1422	BLDG 1422
<b>City, State, Zip Code</b>	Fort Eustis, VA 23604	Fort Eustis, VA 23604
<b>Phone number</b>	757-878-2585	757-878-2585
<b>DSN</b>	826-2585	826-2585
<b>E-MAIL</b>	Michael.parise.1.ctr@us.af.mil	Keith.banks.1.ctr@us.af.mil

	<b>The Pines Golf Course</b>	<b>Natural Resources/Environmental</b>
<b>Name</b>	Jacob Adams	Timothy P. Christensen
<b>Duty Title</b>	Maintenance Superintendent	Natural Resources Manager/IPMC
<b>Office Symbol</b>	The Pines Golf Course	733 CES/CEIE
<b>Street Address</b>	3518 Mulberry Island Road	1407 Washington Blvd
<b>City, State, Zip Code</b>	Fort Eustis VA 23604	Fort Eustis VA 23604
<b>Phone number</b>	757-878-2252	757-878-4231
<b>DSN</b>	826-2252	826-4231
<b>E-MAIL</b>	jacob.adams.11@us.af.mil	Timothy.christensen.6@us.af.mil

	<b>Base Operations Support Supervisor</b>	<b>Base Operations Support PMQAE</b>
<b>Name</b>	John Fain	Desiree McHan (Operations FL/CES)
<b>Duty Title</b>	Contractor	Contracting Officer's Representative
<b>Office Symbol</b>	Alutiiq	733 CES/Operations FL
<b>Street Address</b>	BLDG 1425	BLDG 1407 Washington Blvd
<b>City, State, Zip Code</b>	Fort Eustis, VA 23604	Fort Eustis, VA 23604
<b>Phone number</b>	757-878-2578	757- 878-7369
<b>DSN</b>	826-2578	826-7369
<b>E-MAIL</b>	John.fain.ctr@us.af.mil	desiree.mchan@us.af.mil



	<b>Grounds Maintenance Supervisor</b>	<b>Grounds Maintenance Contract PMQAE</b>
<b>Name</b>	Gary Leckie (contractor)	Janice McGhee (Operations FL/CES)
<b>Duty Title</b>	Contractor	Contracting Officer's Representative
<b>Office Symbol</b>	Byrd Enterprises Unlimited, Inc.	733 CES/Operations FL
<b>Street Address</b>	2000 Main Street	BLDG 1407 Washington Blvd
<b>City, State, Zip Code</b>	Lynchburg, VA 24504	Fort Eustis, VA 23604
<b>Phone number</b>	434-485-8233	757-878-5466
<b>DSN</b>		826-5466
<b>E-MAIL</b>	gleckie@byrdenterprises.net	janice.mcghee@us.af.mil

	<b>Flight Safety/Bird Air Strike Hazard (BASH)</b>	<b>Other</b>
<b>Name</b>	Teddy Harlow	
<b>Duty Title</b>	Airfield Safety Officer	
<b>Office Symbol</b>	1ST Fighter Wing	
<b>Street Address</b>	BLDG 2411	
<b>City, ST Zip Code</b>	Fort Eustis, VA 23604	
<b>Phone Number</b>	757-878-5665	
<b>DSN</b>	826-5665	
<b>E-MAIL</b>	Teddy.harlow@us.af.mil	

**IX. FY22 Annual IPMP Certification**

	<b>This FY22 Annual IPMP Update is submitted by:</b>	<b>Command IPMP Annual Update Certification:</b>
<b>Name</b>	Timothy P. Christensen	Armando Rosales
<b>Duty Title</b>	IPMC	Pest Management Professional/Command Entomologist
<b>Office Symbol</b>	733 CES/CEIE	AFCEC/COSC
<b>Street Address</b>	1407 Washington Blvd	139 Barnes Dr. Suite 1
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<b>DSN</b>	826-4231	DSN
<b>E-MAIL</b>	Timothy.christensen.6@us.af.mil	Armando.rosales.1@us.af.mil
		Signature:
		Date:

**Maintain a signed copy of this form with the IPMP.**

**APPROVED BY:**

**MIGUEL L. CAPELLAN**  
**Director, 733d Civil Engineer Squadron**

**DATE:**

## Annex A: Updates to the IPMP

1. Add the acronym “RIFA (Red Imported Fire Ants)” to acronym list (page vii).
2. VIII. Environmental Considerations. 4. Federally Listed Species. B. Indiana and Northern Long-eared Bats. This paragraph is revised to read (page 15):

B. Northern Long-eared Bat and Black Rail. The federally threatened Northern Long-Eared Bat (*Myotis septentrionalis*) is the only federally listed species documented on the installation. This species is expected to occur primarily in natural areas (but could conceivably utilize trees in developed/disturbed areas). Pesticide use in natural areas include herbicides to control invasive vegetation or in some cases undesirable vegetation related to habitat management. Treatments of herbaceous vegetation is not expected to impact the bat. Other pesticides used in natural areas could include insecticides and acaricides to control mosquitoes, ticks and chiggers. Applications would be performed under daytime conditions and only in cases where it is needed to reduce impacts to human health. Aerial applications of insecticides for mosquitoes could be a more critical technique but occur infrequently and only after an Environmental Assessment and AAPSON have been completed. Insecticides and acaricides would be applied to ground surfaces where ticks and chiggers have been documented such as bivouac, range firing lines and perimeters. These applications would also be infrequent. The Black Rail (*Laterallus jamaicensis*) is a small marsh bird that was listed as threatened in October 2020. It occurs in the installation’s geographical region of influence but has never been documented on JBLE-Eustis based on several wildlife/bird surveys between 1997 and 2021. It is not expected to occur in areas containing common reed which may be treated with herbicides when and where feasible.

3. IX (Program Administration).10 (Reports and Records). B (Integrated Pest Management Information System (IPMIS)). This paragraph is revised to read as follows (page 22):

B. Enterprise Environmental, Safety, and Occupational Health Management Information System (EESOH-MIS). A pesticide management module was incorporated into EESOH-MIS effective August 2021 replacing the Integrated Pest Management Information System (IPMIS).

4. IX (Program Administration). 10 (Reports and Records). C (BOS Contract Records and Records for Pest Management) (1)(e). This bullets noted in this paragraph are revised to read as follows (page 23):

- Date of application/pest control task.
- Start time of the action.
- Finish time of the action.
- Target pest.
- Area size (size of area treated/affected).
- Location.
- Site/Location type.

- Operation/process performed.
- Performed indoors or outdoors.
- Pesticide Product (complete commercial name).
- EPA Registration Number.
- Amount of Pesticide Product Concentrate applied.
- Units (of Amount of Pesticide Product Concentrate applied).
- Amount of final solution/mixture applied.
- Units (of Amount of final solution/mixture applied).
- Applicator & Certification no.
- Comments.

5. IX (Program Administration). 10 (Reports and Records). C (BOS Contract Records and Records for Pest Management) (1)(e).

The following existing narrative is deleted (page 23): \* Once IPMIS becomes available and re-implemented, monthly reports are not likely to be needed. Entry of pest control work into IPMIS shall be accomplished within a specified period as determined with its replacements.

6. IX (Program Administration). 10 (Reports and Records). D. (All other pesticide applicator contractor, Newport News pest control staff, and DOD certified applicators). This paragraph is revised to read as follows (page 24):

All other applicators performing pest control work and applying pesticides must report their work and pesticide applications to the IPMC. Each individual application is reported to the IPMC using the Excel spreadsheet with the following data fields (these reports are submitted within 5 working days of any given application):

- Date of application/pest control task.
- Start time of the action.
- Finish time of the action.
- Target pest.
- Area size (size of area treated/affected).
- Location.
- Site/Location type.
- Operation/process performed.
- Performed indoors or outdoors.
- Pesticide Product (complete commercial name).
- EPA Registration Number.
- Amount of Pesticide Product Concentrate applied.
- Units (of Amount of Pesticide Product Concentrate applied).
- Amount of final solution/mixture applied.
- Units (of Amount of final solution/mixture applied).
- Applicator & Certification no.
- Comments.

7. IX (Program Administration). 10 (Reports and Records). E (The Pines Golf Course applicators). The bullets noted in this paragraph are revised to read as follows (page 24):

- Date of application/pest control task.
- Start time of the action.
- Finish time of the action.
- Target pest.
- Area size (size of area treated/affected).
- Location.
- Site/Location type.
- Operation/process performed.
- Performed indoors or outdoors.
- Pesticide Product (complete commercial name).
- EPA Registration Number.
- Amount of Pesticide Product Concentrate applied.
- Units (of Amount of Pesticide Product Concentrate applied).
- Amount of final solution/mixture applied.
- Units (of Amount of final solution/mixture applied).
- Applicator & Certification no.
- Comments.

8. IX (Program Administration). 14. (Status of Arthropod Disease Vectors Surveillance and Control). A. (Mosquitoes on Fort Eustis). This paragraph is revised to read as follows (page 28):

The following list is a consolidation of those mosquito genera and species documented on the installation based on surveys performed in 2009, 2016, 2017 and 2021:

Genera:

*Aedes*

*Anopheles*

*Coquillettidia*

*Culex*

*Culiseta*

*Orthopodomyia*

*Psorophora*

*Uranotaenia*

Species:

<i>Aedes albopictus</i>	<i>Aedes cinereus</i>
<i>Aedes hendersoni</i>	<i>Aedes infirmatus</i>
<i>Aedes j. japonicas</i>	<i>Aedes sollicitans</i>
<i>Aedes taeniorhynchus</i>	<i>Aedes triseriatus</i>
<i>Aedes vexans</i>	<i>Anopheles bradleyi</i>
<i>Anopheles crucians</i>	<i>Anopheles punctipennis</i>
<i>Anopheles quadrimaculatus</i>	<i>Coquillettidia perturbans</i>
<i>Culex erraticus</i>	<i>Culex pipiens</i>
<i>Culex pipiens-quinquefasciatus</i>	<i>Culex restuans</i>
<i>Culex salinarius</i>	<i>Culex territans</i>
<i>Culex trivittatus</i>	<i>Culiseta impatiens</i>
<i>Culiseta inornata</i>	<i>Orthopodomyia signifera</i>
<i>Psorophora ciliate</i>	<i>Psorophora columbiae</i>
<i>Psorophora ferox</i>	

9. IX (Program Administration). 14. (Status of Arthropod Disease Vectors Surveillance and Control). B. (Ticks on Fort Eustis). This paragraph is revised to read as follows (page 29):

The following tick species and representative vectored pathogens (and disease condition they are capable of causing) have been documented on the installation as of 2021:

10. Appendix B – Description of BOS Pest Control Contract Operation and General Procedures for Pest Control, XIII (Documentation), 9. (Monthly Pest Management Report\*. This paragraph is revised to read (on page B-19):

Monthly Pest Management Report. The IPMC evaluates monthly BOS pest control/pesticide applications and enters application data into EESOH-MIS. The BOS contractor prepares its monthly report using a standardize Excel spreadsheet that requires data entries for the following fields:

- Date of application/pest control task.
- Start time of the action.
- Finish time of the action.
- Target pest.  
Area size (size of area treated/affected).
- Location.
- Site/Location type.
- Operation/process performed.
- Performed indoors or outdoors.
- Pesticide Product (complete commercial name).
- EPA Registration Number.
- Amount of Pesticide Product Concentrate applied.

- Units (of Amount of Pesticide Product Concentrate applied).
- Amount of final solution/mixture applied.
- Units (of Amount of final solution/mixture applied).
- Applicator & Certification no.
- Comments.

11. Appendix D – Aerial Application of Pesticides. This appendix is voided for mosquito control (and forest pest control) until an Environmental Assessment and a new Aerial Application of Pesticides Statement of Need (AAPSON) are completed. This appendix is also considered void for aerial application of herbicides against vegetation (primarily common reed) until a new AAPSON is approved for aerial herbicide treatments.

12. Appendix J – JBLE-Eustis Pesticide Application Record Report.

Change all existing narrative to read:

Pest management functions are now documented in the Enterprise Environmental, Safety, and Occupational Health Management Information System (EESOH-MIS) pest management module. To ensure pest management functions data is incorporated, all pest control/pesticide applicators provide data using a preformatted Excel spreadsheet with the following fields:

- Date of application/pest control task.
- Start time of the action.
- Finish time of the action.
- Target pest.
- Area size (size of area treated/affected).
- Location.
- Site/Location type.
- Operation/process performed.
- Performed indoors or outdoors.
- Pesticide Product (complete commercial name).
- EPA Registration Number.
- Amount of Pesticide Product Concentrate applied.
- Units (of Amount of Pesticide Product Concentrate applied).
- Amount of final solution/mixture applied.
- Units (of Amount of final solution/mixture applied).
- Applicator name & Certification no.
- Comments.

These reports shall be submitted to the IPMC within 5 days of the application. This spreadsheet was previously distributed to authorized pest control/pesticide applicators.

13. Appendix O: Red Imported Fire Ant Management Plan.

- A. Change paragraph 2 (Responsibilities). C (Operations Flight and Engineer Flight) to read (page O-2):

Operations and Engineer Flights. Flight Chiefs shall direct project managers (PM) and Contract Officer's Representatives (COR) to ensure movement/transfer of soil and other regulated articles (identified in paragraph 3 below) is performed in accordance with Environmental Management Procedure (EMP) 4.4.6.16 (Contracting JBLE-Eustis Environmental Special Conditions and Affirmative Procurement), section 11.1.7.

- B. Change paragraph 3 (RIFA control techniques) to read (page O-3):

RIFA management techniques.

- A. JBLE-Eustis shall conform operations to comply with Virginia's Imported Fire Ant Quarantine (Title 2 Virginia Code Chapter 315, Virginia Imported Fire Ant Quarantine for Enforcement of the Virginia Pest Law).
- B. Soils and other articles regulated under this quarantine shall not be brought onto the installation unless written confirmation indicating the articles are free of red imported fire ants (including their eggs and immature stages) that has been confirmed through the Virginia Department of Agriculture & Consumer Services. Environmental Management Procedure (EMP) 4.4.6.16 (Contracting JBLE-Eustis Environmental Special Conditions and Affirmative Procurement), section 11.1.7. Other articles include:
- All soils.
  - Grass sod.
  - Plants with roots with soil attached and rhizomes with soil attached.
  - Hay and straw including pine straw.
  - Mulch, logs, and pulpwood.
  - Any life stage of imported fire ant.
- C. Suspected colonies shall be investigated as quickly as feasibly possible by CEIE natural resources/IPM staff. Staff shall advise units or activities potentially affected by such colonies.
- D. CEIE staff shall issue service order for BOS pest control shop for action. Baits shall be the primary control technique.

14. Change all reference to Civil Engineer Division/CED to Civil Engineer Squadron/CES.