

**Questions for the Record Submitted to  
John A. Goines III by  
Senator Claire McCaskill  
Senate Committee on Homeland Security and Governmental Affairs  
August 1, 2013**

1. Question: For the last five years, please provide the number of analyses the Life Sciences Equipment Laboratory has performed annually.

Answer:

<b>Calendar Year</b>	<b>New Cases Delivered to LSEL</b>	<b>Cases Analyzed</b>	<b>Cases in Work or Backlogged</b>
<b>2009 (a)</b>	12	13	9
<b>2010</b>	4	7	6
<b>2011</b>	10	11	5
<b>2012</b>	15	7	13
<b>2013</b>	191 (b)	6 (to date)	TBD
<b>Total</b>	232	44 (to date)	33 (to date)

Notes:

- a) 2009 started with a backlog of 10 cases.
- b) LSEL received 187 cases from the Joint POW/MIA Accounting Command's (JPAC) Central Identification Laboratory between June 17, 2013 and August 20, 2013.

2. Question: What analyses is LSEL currently able to perform? Are there certain types of recoveries that LSEL is better suited for involvement?

Answer: The LSEL is currently able to perform analyses of life sciences equipment (LSE)-related material recovered from ground action or aircraft crash sites. The LSE category incorporates most variants of flight apparel, military uniforms, and combat infantry gear (including weapons-related components up to .50 caliber); aircraft fixed or ejection seats; most forms of parachute and aerodynamic decelerators; life rafts and personnel flotation systems; avionics communication and visual signaling devices; as well as other specialized equipment ranging from body armor to identification media. From the analyses of the LSE artifacts, the LSEL provides the accounting community conclusions as to the presence of personnel; the number of personnel at the site; the time frame of loss; the Service branch associated with the loss; and the potential survivability of any associated personnel. The LSEL has the capability to support cases from World War I through current military operations for all U.S. Military Service branches, including foreign allied nations and some enemy combat military forces.

The LSEL is better suited for cases where minimal or no remains have been recovered, or for cases where anomalies exist with regard to recovered LSE or material evidence. Even with

advances in forensic science, it remains true that there may be instances where no or minimal amounts of non-diagnostic human remains will be recovered despite the best efforts of the U.S. Government to provide the “fullest possible accounting” of our missing Service personnel.

By analyzing the recovered LSE and material evidence, the LSEL can provide an overall image of what the evidence supports - or does not support - about its previous user and his or her probable status. Difficult cases, where human remains are not recovered or available and LSE and material evidence have been recovered, could be forwarded to the LSEL for analysis regardless of the conflict period. The resultant LSEL analysis could then be included in the information presented to the next of kin as to the efforts that the POW/MIA accounting community has taken to account for their missing loved ones.

3. Question: The GAO report was very critical of the dysfunctional, inefficient, and duplicative relationship between CIL and LSEL. - Please provide a breakdown of responsibilities between CIL and LSEL and where those responsibilities intersect when CIL and LSEL work together.

Answer: In 1988, the LSEL Chief was approached by representatives from the Joint Casualty Resolution Center (JCRC) to examine equipment artifacts recovered in Southeast Asia to determine the feasibility of accounting for personnel based solely on the equipment. Based upon several test case studies, the LSEL Chief and JCRC discovered that these studies could likewise aid in the determining the presence of people at historic sites, especially in instances where no human remains were found. It was in this context that the LSEL created a dedicated POW/MIA mission team after being tasked by Congress and the Joint Chiefs of Staff in 1993.

The LSEL was designed to provide laboratory-level analysis of the recovered life sciences equipment (LSE) and other material evidence. The LSEL also trains JCRC/Joint Task Force-Full Accounting (JTF-FA)/Joint POW/MIA Accounting Command (JPAC) Life Support Investigators (LSI) and provides field-level analysis at the designated recovery sites.

Based upon the concept of field-analysis versus laboratory, there is an intersection of analysis abilities between the JPAC LSI and the analysts assigned to the LSEL. JCRC/JTF-FA/JPAC LSIs serve as field-level specialists on site to identify and interpret the specific area where LSE and material evidence were concentrated. By identifying an area of concern, emphasis could be directed to the area that would increase the probability of recovering human remains. Where a site did not contain human remains, the recovered material would be sent to the LSEL for analysis at the laboratory-level. The LSEL would then be responsible for analysis of the materials and provide conclusions to JCRC/JTF-FA/JPAC. The final report would include laboratory-based conclusions as to the presence and number of personnel at the site, the time frame of loss, identification of Service branch, and potential survivability of any associated personnel.

On this basis, in 1994 the LSEL created a facility and capability to cover the various conflict periods that involve missing American personnel. The LSEL's responsibilities are initiated when CIL provides a case for analysis. The LSEL is tasked with answering four questions:

- 1) Can you confirm that the submitted aircrew life support equipment artifacts are consistent with types worn or used by aviators and crew in the identified era?
- 2) Can you determine, based upon analysis of recovered life support materials, the

number of individuals onboard the aircraft at the time of the crash?

3) Can you date the crash based on any observed modifications among the artifacts?

4) Based on the recovered life support equipment, can you determine if this crash was survivable?

Upon completion of analysis, the LSEL issues a report answering these four questions and provides it to JPAC/CIL and DPMO. After a two-week review period, the LSEL forwards a copy of the report to the respective Service Casualty Office, with a copy for respective families of the missing service members involved in the loss under review.