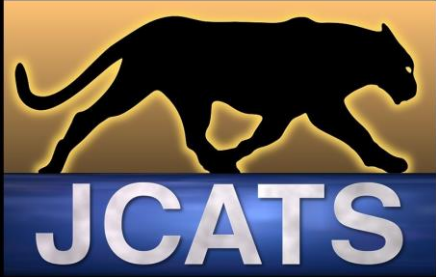




GLOBAL  
SECURITY



LAWRENCE LIVERMORE NATIONAL LABORATORY

# Joint Conflict and Tactical Simulation (JCATS)

## JCATS Events

### 2023 JCATS International Users Conference

PRESENTED BY:

**Brian Stevenson**

*Conflict Simulation Laboratory Operations Manager*

04 July 2023



# JCATS In Use

- **JCATS has been in continuous use around the world despite the COVID pandemic shutdowns**
- **Used in stand-alone, single-country exercises and multinational exercises**
- **Its flexibility makes it ideal as the primary constructive model in multinational exercises**

# Events



➤ Tiger Balm

➤ Pacific Sentry

➤ African Lion

➤ Keen Edge

➤ Viking

➤ Analysis

- School Safety
- Contested Log
- IADS

# Tiger Balm



## ➤ TiB is a bilateral LVC event between the United States and Singapore

- 42<sup>nd</sup> annual TiB – 08 – 19 May 2023
- Joint Multinational Simulation Center – Indo-PACOM, Schofield Barracks, Hawaii
- SAF Wargame Center, Pasir Laba Camp, Singapore
- Approximately 400 personnel from:
  - HQ, 6<sup>th</sup> Singapore Division / HQ Sense & Strike
  - 10<sup>th</sup> Singapore Infantry BDE
  - Hawaii National Guard
  - 278<sup>th</sup> ACR

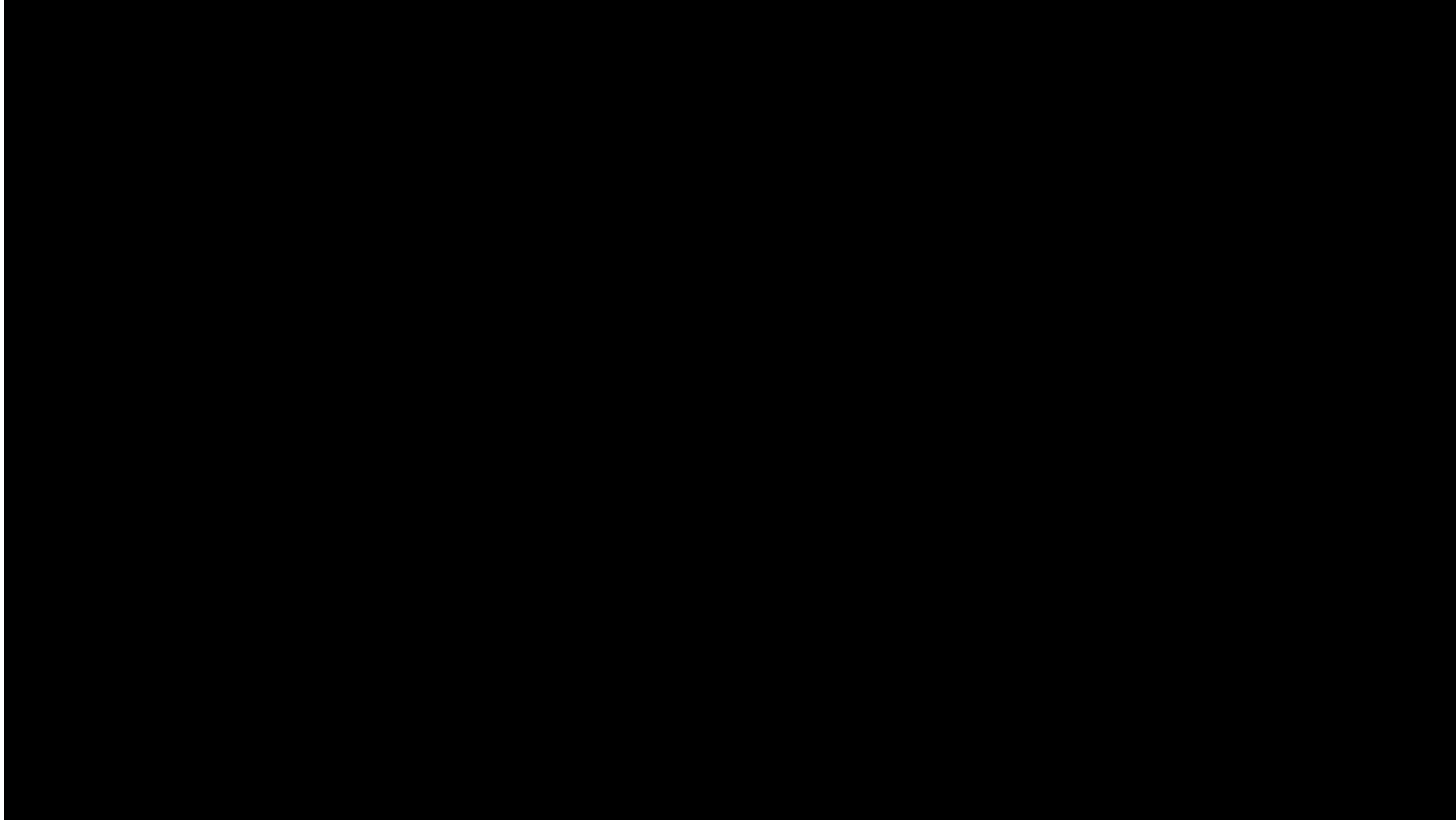
## ➤ The CSL provided on-site support personnel for both TiB 2022 & 2023

## ➤ Included Combined Arms Live Fire

- 250 soldiers from 40<sup>th</sup> BN, Singapore Armored Regiment & 2<sup>nd</sup> SQDN, 14<sup>th</sup> Cavalry RGT
- Company-level combat operations
- US Army field artillery and intelligence units provided real-time target surveillance & acquisition



# Tiger Balm 23



# African Lion



➤ **African Lion is U.S. Africa Command's, premier, joint, annual exercise**

- 13 May – 16 June 2023

➤ **Joint, all-domain, multi-component, multinational exercise,**

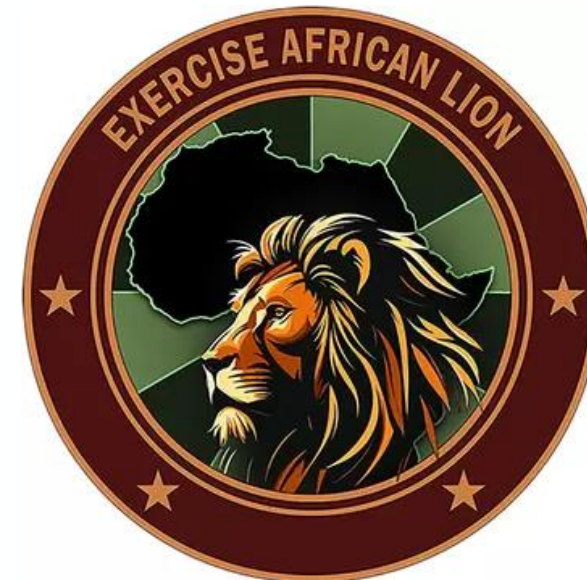
➤ **Full array of mission capabilities with the goal to strengthen interoperability among participants and set the theater for strategic access**

➤ **Utilizes the Joint Live Virtual Constructive federation (JLVC) of which JCATS is the primary ground maneuver model**

➤ **13 nations and NATO**

- Hosted by Ghana, Morocco, Senegal, & Tunisia
- U.S. Army Europe (USAEUR)
- U.S. Army Southern European Task Force-Africa (SETAF-AF)

➤ **More than 8,000 participants**



# Keen Edge (2022)



## ➤ Keen Edge is a biennial, bilateral command post exercise between the US and Japan

- 27 January – 03 February 2022
- Held at various locations in Hawaii and Japan
- Alternates with Keen Sword, a field exercise

## ➤ Keen Edge 2022 included JCATS and depicted scenarios for joint forces to practice crisis and contingency responses

## ➤ U.S. Forces Japan and U.S. Indo-Pacific Command

- 500 US troops

## ➤ Japan Joint Staff

- 1380 Japanese troops



# NATO



# NATO Partnership



- **Our highly-valued and enduring ties to NATO help shape our current and future modeling and simulation capabilities**
- **Active NATO Foreign Military Sales (FMS) Case**
  - Training, JCATS/JLOD Enhancements, Technical Support
  - Primary NATO Technical Coordination - JFTC
- **CWIX integration and demonstration with JCATS and JLOD**
  - NETN FOM integration, ITC and C2SIM integration, etc.
- **NATO M&S Specialist Course – M&S COE, Rome**
- **NATO CA2X2 Forum Participation**
- **MSG-191 and MSG-201**
- **NATO M&S Next Generation support**



# Coalition Warrior Interoperability eXploration, eXperimentation, eXamination eXercise (CWIX)

UNCLASSIFIED



- A large-scale event intended for continuous testing of interoperability between Alliance and partner nations for simulations, C2 systems, and fielded, nearly fielded and experimental systems.
- Supported the CWIX 2023 exercise at the Joint Force Training Centre (JFTC) in Bydgoszcz, Poland
- Supported the JFTC, Georgian and Romanian JCATS personnel with integration with other simulations and C2 systems (ITC, FLAMES, SWARD, SITAWARE, etc)
- Development and testing of NETN FOM (ORG and ETR FOM Modules)
- <https://events.jftc.nato.int/>



# NATO Exercise Support M&S Integration Specialist Course

UNCLASSIFIED



- Course conducted in collaboration with NATO Modeling & Simulation Centre of Excellence (M&S COE), the Joint Force Training Centre (JFTC), the Italian Army Simulation and Validation Centre (CESIVA), and LLNL
- Theoretical and practical hands-on course for integration of simulation systems, C2, CAX planning and execution
- Uses JCATS and VBS as examples but isn't a JCATS or VBS specific course
- <http://www.mscoe.org>





# Training



# Training Alternatives

- From the first JCATS NET to present, the CSL has sent personnel to sites around the world to conduct training
  
- The CSL now offers alternatives:
  - Training at LLNL
  - Live, online Training
  
- On-site training is still the default
  
- Some training must be conducted on-site

# On-Site Training at LLNL



## LLNL has opened the Livermore Valley Open Campus (LVOC). It is available to all LLNL organizations to utilize

- Room availability is first-come-first-served
- No special security or clearance requirements

## Limitations & Considerations

- Nation must pay for student travel
- Nation must pay for instructor time
- Limited time – 2 weeks or less
- Limited attendees – 15 or less

## Costs can be included in case renewal

## Training dates must be coordinated with CSL six months ahead to ensure facility availability



# On-Site Training at LLNL



- First course conducted with Oman – Sept/Oct 2022
- Conducting 2<sup>nd</sup> course with Oman Oct 2023
- Tentative plan for course with Australia



# Live Webcast Training



➡ **The CSL has constructed a webcast studio for live video streams and recording videos**

➡ **Instructor can display JCATS desktop, including JCATS tools, or white board as necessary**

- Pay for instructor time – include in case if requested
- No travel costs incurred for instructors or participants
- Training must account for time zone differences
  - May require training only partial days and extending required training time (example: Instead of five 8-hour days; ten 4-hour days)

➡ **First training: June 2023**

- Live, LLNL-internal Vista training conducted via WebEx

➡ **Long-term plan – Produce a series of training videos on basic JCATS operations**

- Each video is limited in scope and time
  - Not an entire menu; just one aspect (ex: Not Movement controls; just Routes)
  - 3-5 minutes; easily digestible
- May provide via version distribution
- May provide via CSL website
- What topics?



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