

NEWS FROM THE FRONT



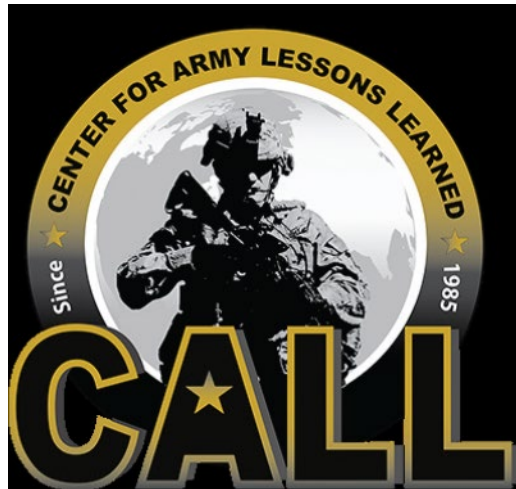
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*U.S. Army Africa SAFETY PILOT PROGRAM: A Best
Practice to Build partner capacity*

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News from the Front: USARAF Safety Pilot Program: A Best Practice to Build Partner Capacity

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Front Cover. Safety Pilot participants from the Kenyan Air Force discuss safety procedures during maintenance, January 16, 2017, at a Kenyan Air Force Base. U.S. Army photo by CW4 Stephen R. Boyd, USARAF Aviation Safety Officer.

Starting in April of 2017, the U.S. Army Africa (USARAF) Safety Office began the process of creating a safety program designed to identify needs based safety training and develop products to increase the safety capabilities of African Partner Nations. While developing the initial concept, the USARAF Safety Office identified the State Partnership Program and their existing relationships with Partner Nations as a viable option for access to these countries. At that time, the State Partnership Program in Africa matched thirteen countries with eleven states (Figure 1). African Partner Nation (PN) participation has been voluntary and initially solicited through the relationships established by the State Partnership Program. Uganda and Kenya were the primary participants in the Safety Training Project. The first safety training engagement was in January 2018 with the Kenya Peoples Defense Air Force (KPDFAF) at the Laikipia Air Force Base in Nanyuki, Kenya. This engagement was completed in concert with Kenya’s State Partner; the Massachusetts Army National Guard.

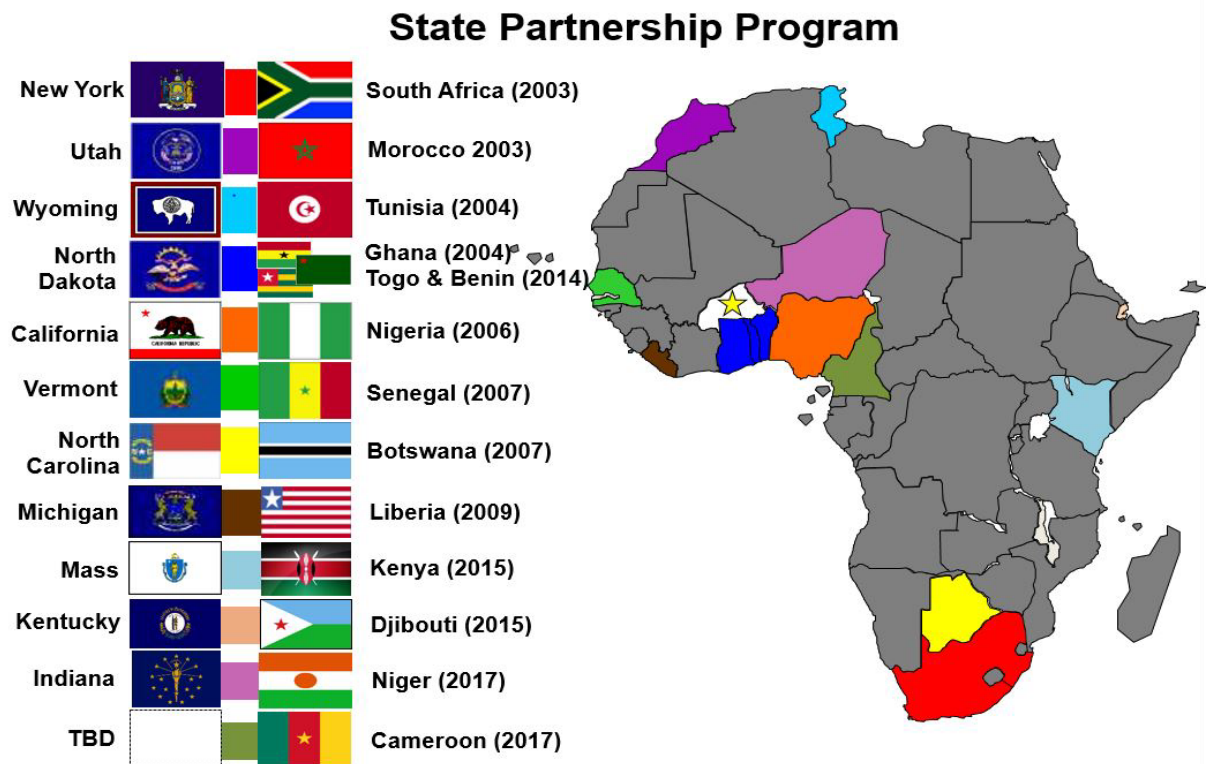


Figure 1. Current SPP Map.

Train and Equip Foreign Military Sales (FMS) cases, Theater Security Cooperation (TSC) Exercises and Medical Readiness Training Exercises (MEDRETEs).

“The U.S. Army Africa Safety Program is good for the Kenyan Defense Force and will help aviation and ground safety.” COL Omenda, Base Commander

To promote the Safety Pilot Program, USARAF employed an adaptable five-phased methodology for strategic messaging. The methodology provided a standardized process for:

- Promoting Safety Excellence
- Scoping Safety Projects
- Logistical Planning
- Executing Safety Training
- Capturing Lessons Learned and Sharing Best Practices between USARAF and Partner Nations

Combining this methodology with U.S. Africa Command’s Combatant Commander Campaign Plan Lines of Effort, the USARAF’s Multi-Year Plan, and the associated supporting objectives enabled the Safety planners to embed the program with U.S. objectives. Successful implementation of the program directly supported four of the six USARAF Commander’s priorities (Table 1).

COMMANDER’S PRIORITIES	SAFETY PILOT PROGRAM
Develop Army Leaders	Implement “developmental” and “shadowing opportunities” as part of the Army’s Leader Development program.
Maximize Training opportunities: contribute to Army readiness while meeting Theater Campaign Plan requirements	Safety training products are tailored to the requirements and interest of each participating nation based upon factors unique to Partner Nation.
Increase Lines of Effort partner capabilities and capacity	Increase Partner Nation safety capabilities and their ability to maintain their formations through effective Risk Management.
Expand the regional and sub-regional understanding of Africa (develop community of interest; Joint, Interagency, Inter-organizational and Multinational)	Successful execution of Pilot Project’s Strategic Messaging Methodology promotes value added by participation in the program to garner participation by other Partner Nations.

Table 1. U.S. Army Africa Commander’s Priorities

The USARAF Safety personnel employed reach-back capabilities to develop the program through collaboration with the U.S. Army Training and Doctrine Command (TRADOC), U.S. Army Technical Center for Explosive Safety (USATCES) and National Guard Bureau. The model for the program leveraged training plans drawn from six core

EMERGENT ARMY SAFETY AND OCCUPATIONAL HEALTH MANAGEMENT SYSTEM 6 CORE SAFETY FUNCTIONS



Figure 2. Core Safety Functions

safety functions of the Army’s Emergent Safety and Occupational Health Management System under the U.S. Army Safety Program. Figure 2 identifies the sub-components under each of the core functions which USARAF could help partners implement into their safety programs.

“The U.S. safety training helped build my confidence about doing my job in the future.”
(Kenyan Air Force Airman)

After identifying the core safety functions they could help the Partner Nation with, USARAF safety personnel developed an à la carte menu of eight scalable safety products (Figure 3). The safety training and products were tailorable to the requirements

and capabilities of each participating nation based upon unique factors appropriate to each nation. Through multiple visits to the Partner Nation and discussions pertaining to their goals and objectives, a lesson plan was developed. Figure 4 depicts a sample lesson plan for a forty-hour block of instruction presented to the unit safety personnel.

It was USARAF's view that Partner Nations lack, but require, specialized safety training. The strategic goal of this pilot was to develop a well-trained cadre of Partner Nation safety professionals providing leadership in safety and have Soldiers knowledgeable in the practical application of safety to perform their job. These same tenets are required in AR 385-10, chapter 10, for U.S Army personnel.

Partner Nation safety professionals provide safety guidance and oversight of safety within their area(s) of responsibility. They advise their commander on safety issues, policies, and have the staff function of ensuring that policy is implemented within the command.

8 SCALABLE SAFETY TOOLKITS

Create/Use Checklists & SOP's to Provide Examples:

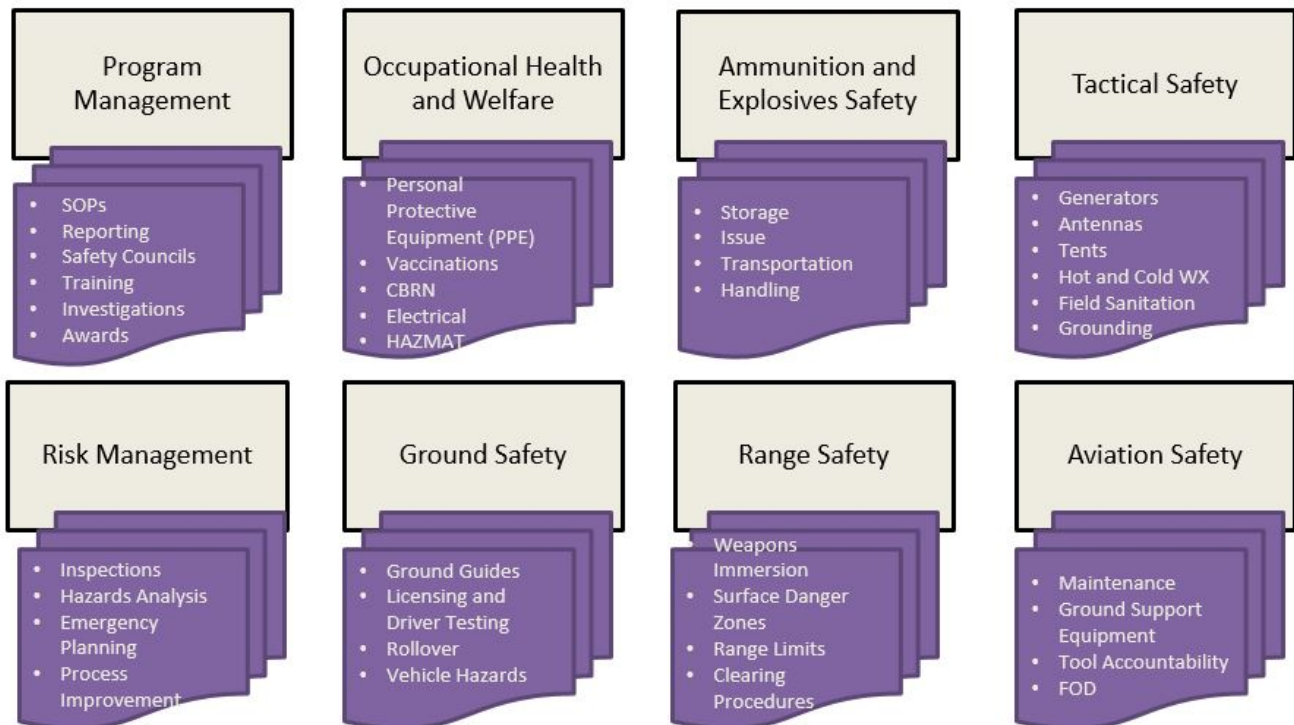


Figure 3. Scalable Safety Toolkit.

A very successful proof-of-concept trial run for the Safety Pilot Program occurred from 14 – 25 January 2018, USARAF Safety Officer Chief Warrant Officer 4 Stephen Boyd and a 3-person team from Massachusetts National Guard State Partnership Program conducted an initial capabilities assessment and provided aviation safety and maintenance instruction to an element of the Kenyan Air Force (KAF) Huey Engineering Squadron supporting a Foreign Military Sales case.

MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
0800 – Classroom Setup 0900 – Opening Introductions 0930 – History of Safety <ul style="list-style-type: none"> Impact on US Military 1000 – Accident Statistics <ul style="list-style-type: none"> Trends w/l the ranks 1030 – Theory of Accident Causation	Deep Dive - Safety Program Modules : 0900–Safety Program Management <ul style="list-style-type: none"> SOPs Reporting Safety Councils Training Investigations Awards 1100 – Introduction to Risk Management (RM) <ul style="list-style-type: none"> Examples of RM Application Inspections Hazards Analysis Emergency Planning Process Improvement 	0900 – Occupational Health & Welfare Safety <ul style="list-style-type: none"> Personal Protective Equipment (PPE) Hearing Conservation Electrical HAZMAT 	0900 - Ammunition and Explosives Safety <ul style="list-style-type: none"> Storage Issue Transportation Handling 	0900 – Introduction to Aviation Safety (if applicable) <ul style="list-style-type: none"> Maintenance/Shops Safety Ground Support Equipment Tool Accountability Pre Accident Plan ALSE
LUNCH 1200-1300 (Breaks A.M. & P.M.- at the instructors discretion)				
1300 – Roles and Responsibilities of a Safety Officer 1400 – Small Unit Leadership and Safety 1600 - Overview - Safety Program Modules: <ul style="list-style-type: none"> Program Management Ammunition & Explosives Safety Tactical Safety Range Safety Ground Safety Occupational Health & Welfare Aviation Safety Risk Management 	1300 –Intro to RM (Cont'd) 1500 – RM Practical Exercise(s)	1300 – Ground Safety <ul style="list-style-type: none"> Ground Guides Driver Testing Rollover Vehicle Hazards 	1300 – Range Safety <ul style="list-style-type: none"> Weapons Immersion Surface Danger Zones Range Limits Clearing Procedures 	1300 – 1500 Hangar & Ramp Safety <ul style="list-style-type: none"> Housekeeping FOD Grounding Vehicle Hazards 1515 – End of Course Critique & Open Discussion 1630-1700 – Closing Ceremony

Figure 4. Sample 40-Hour Safety Officer Lesson Plan

The U.S. team provided classroom and hands-on instruction on various aviation safety and maintenance related subject matter to increase KAF safety and maintenance capabilities. Daily After Action Reviews were incorporated into the process to emphasize and reinforce lessons, capture identified issues, and provide feedback. This engagement was very successful and has led to a request from the Kenya Air Force to fully participate in the program. A tailored safety solution is currently being developed for the KAF and will be executed during third quarter FY18.



Kenyan Air Force personnel implement skills learned during Safety Pilot Project, 22 January, 2018, at a Kenyan Air Force Base. U.S. Army photo by CW4 Stephen R. Boyd, USARAF Aviation Safety Officer.

Along with monitoring program development and growth, mid-level Safety Managers also have the function of identifying safety training required to reinforce the job performance of personnel within their area of responsibility. To aid Partner Nations in this regard, USARAF Safety developed a 24-Hour Commander’s Safety Program of Instruction (Figure 5) which may be conducted in concert with the 40-hour course, or as a stand-alone course. Whereas the 40-hour course is designed to train Safety Officers and NCOs, the 24-hour course is designed to train their leadership on what to expect from their safety personnel, how to identify and measure safety progress within their organization and how to promote future growth.

MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
0800 – Classroom Setup 0900 – Opening Introductions 0930 – History of Safety • Impact on US Military 1000 – Accident Statistics • Trends w/ the ranks 1030 – Theory of Accident Causation	0900–Deep Dive - Safety Program Management <ul style="list-style-type: none"> • SOP Development • Reporting • Safety Councils • Training • Investigations • Awards 	Overview- Safety Program Modules: 0900 – Occupational Health & Welfare Safety 1000 – Tactical Safety 1030– Ground Safety 1100 – Range Safety		
LUNCH 1200-1300 (<i>Breaks A.M. & P.M.- at the instructors discretion</i>)				
1300 – Roles and Responsibilities of a Safety Officer 1330– Small Unit Leadership and Safety 1600 - Safety Program Modules: TBD • SUBJECT MATTER WILL MIRROR TOPICS COVERED IN 40 HR TRAINING SESSION	1300 –Introduction to Risk Management (RM) <ul style="list-style-type: none"> • Examples of RM Application • Inspections • Hazards Analysis • Process Improvement 1500 – RM Practical Exercise(s)	1300 – Introduction to Aviation Safety 1600 – Open Discussion 1630-1700 – End of Course Critique/AAR		

Figure 5. Sample 24-Hour Leader’s Course Lesson Plan

With the successful proof-of-concept of the Safety Pilot Program, the USARAF Safety Office is beginning to work with other African Partner Nations to conduct capabilities assessments and propose training solutions to develop their safety programs. Capitalizing on the U.S. Army Safety Lessons Learned, USARAF is striving to reduce the learning curve and facilitate the efficient integration of the new equipment into the Partner Nation’s inventory.

Implementing this program to the fullest extent possible will ensure that Partner Nation safety professionals are thoroughly trained in the basics of safety. However, the expectation is that supplemental safety training will be required throughout their careers. Future training will be identified and selected, which will enhance Partner Nation safety

professionals' knowledge and understanding of safety, with emphasis in specialty areas (aviation safety, tactical safety, industrial hygiene, etc.).

USARAF Safety has experienced a great deal of success in promoting the Safety Pilot Project through participation in the Air Ground Integration (AGI) portion of FMS cases in Kenya and Uganda. USARAF Safety was able to provide aviation subject matter expertise to these engagements while still executing the objectives of the Safety Pilot Project:

- In May, 2018, fourteen members of the Kenya Air Force (KAF) completed the five-day (40-hour) safety training curriculum
- In July, 2018, forty-two members of the Uganda Peoples' Defense Air Force (UPDAF) participated in a three-day General Safety Knowledge class
- In November, 2019, USARAF conducts safety continuation training with UPDAF
- In February, 2020, USARAF Safety provides support to UPDAF in preparation for their move to a brand new flight facility



KAF 40-Hour Safety Training Class



UPDAF Hangar Safety Practical Exercise



A Safety Site Visit was incorporated into safety training for the members of the February, 2020 class, as part of their training prior to occupation of new flight facility.

U.S. Army photos by CW4 Stephen R. Boyd, USARAF Aviation Safety Officer.



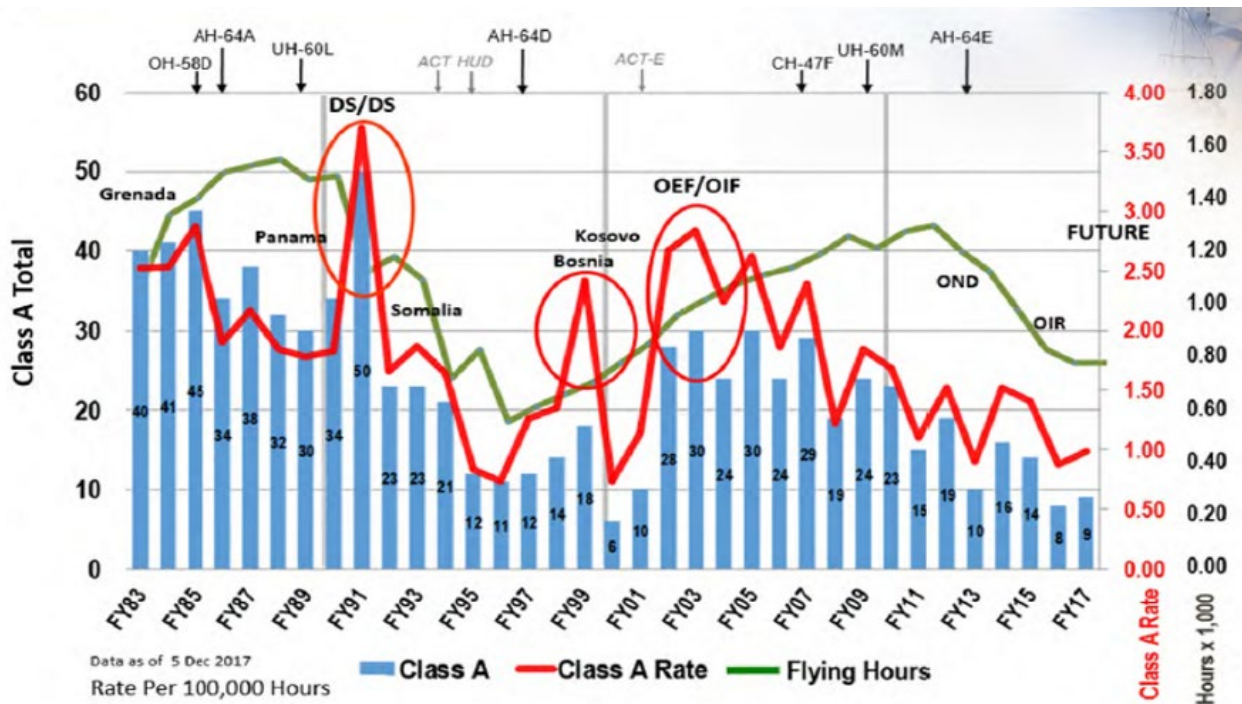
Participants from the Kenyan Air Force conduct hands-on practical exercises with MA National Guard personnel as part of the State Partnership Program. U.S. Army photo by CW4 Stephen R. Boyd, USARAF Aviation Safety Officer.

Making the Case for Value-Add to Partner Nations

It is human nature to avoid getting injured or killed, and thus, basic safety ideals are present, to some degree, in all environments. However, adherence to effective long-term safety concepts such as Risk Management and Accident Causation are foreign concepts that can be difficult to grasp for some PN members.

Explaining the value of promoting safety programs in places where safety has been practiced minimally, and sometimes not at all, presents new challenges that must be overcome for the Partner Nation Senior Leadership to see the value-add of participation in the USARAF Safety Training Program.

The most effective method of overcoming these challenges and getting the buy-in of PN leaders has been to draw correlations between the current PN safety posture and the positive impact that adherence to safety has had in the U.S. Army. This has been successfully accomplished. The graph below demonstrates how the U.S. Army has taken Lessons Learned during conflicts to continually lower incidents and increase effectiveness. As a result, the big take-away that has resonated with the PN leaders is that structured safety programs provide vital TTPs for maintaining their formations and equipment.



IN AVIATION, LESSONS LEARNED DURING ARMED CONFLICTS HAVE BEEN APPLIED TO REDUCED ACCIDENTS AND FATALITIES WHILE ENABLING AIRCREWS TO EXECUTE MORE MISSIONS AND INCREASE FLIGHT TIME.

Lessons Learned:

1. Scalability of the program has proven to be a multi-faceted challenge requiring the ability to, with minor adjustments, adapt the program content to suit the Partner Nation (PN) technology, skill level, literacy and available tech support.
2. Experiences training in Uganda and Kenya have demonstrated that you must always expect the unexpected and prepare accordingly. In both cases, even after prior coordination with the country team, USARAF Safety arrived to find that some the pre-conditions requested for training had not been met. For example, we did not have the exact target audience we requested. Specifically, 40 students arrived for training instead of the 10-15 we specified. These types of unexpected challenges are common and require flexibility and creativity on the part of trainers.
3. PN students were very apprehensive about speaking up in class or drawing any attention to themselves. This was primarily due to cultural barriers which faded away as training progressed. The USARAF training team overcame this by engaging the participants one-on-one during breaks and making a concerted effort to establish sincere relationships with the students.
4. Inclusion of media/videos and hands-on practical exercises into the POI played a crucial role in helping PN participants grasp some of the more complex topics such as Risk Management and Accident Causation.
5. Tech support such as audio/visual equipment, printing, and connectivity were non-existent in the remote locations where the training was conducted. Fortunately, the USARAF team brought much of the required equipment with them.