

Light USAR Team Classifications

@fire

IEC: 21-24 November 2021

Review of IEC Process, Observations, and Recommendations

Introduction

A debrief of the German @fire Light USAR Team IEC was undertaken on Monday 20 December 2021, including the members of the Light Team Quality Assurance Working Group (LTQAWG), the IEC Classifier team leader, and the team Mentor. This paper records the discussion review conversations, observations and recommendations.

The German Light USAR team '@fire – International Disaster Response Germany' undertook the first Light USAR team INSARAG External Classification (IEC) at the Epiesses Training Centre, Switzerland from 21-24 November 2021. This first Light USAR team IEC process followed more than five years of development and engagement with international stakeholders to provide a consistent and sustainable process for the Classification of Light USAR teams to INSARAG standards. The successful completion of the IEC for the @fire team reflected the commitment and preparations of the team; the exercise planners; the classifiers and mentor, and the LTQAWG members.

This paper discusses the @fire Light USAR IEC, and identifies areas where the Classification went well, and where there may be opportunities for change in future Light Classifications. This paper does not provide a review of the skills displayed by the @fire team, as this is detailed in the IEC report.

The Process

Classified Light USAR Teams are now a recognised part of the INSARAG network that includes Light, Medium and Heavy USAR Teams at the National level (National Accreditation Process - NAP), and the internationally deployable Light, Medium and Heavy USAR teams through IEC.

The @fire IEC was conducted in conjunction with the IMSIEME 2021 exercise in Geneva Switzerland from 21-24 November 2021, hosted by Swiss Rescue, following an 18-month delay as a result of the COVID pandemic.

Items identified by team members, classifiers, and mentors during the Light IEC exercise.

- The deployment and mobilisation process worked very well using video feeds to observe the mobilisation from the @fire base. This option was implemented due to the distance that the team had to travel, and the considerations of managing the COVID situation for the exercise.
- Light teams must select and train multi-skilled, multi-functional people to ensure that all tasks and responsibilities can be done by the team of 17-20 people.
- Light teams must pre-plan their deployment strategy to best utilise their multi skilled people to achieve the objectives throughout the exercise.
- The Light USAR Team IEC process does not translate to an easier IEC because the team is smaller. Teams should be aware of the increased exercise tempo due to the large number of task requirements with a reduced team size, and a shorter effective exercise period to achieve the IEC requirements. Multi-tasking is far more essential, compared with Medium and Heavy IEC teams.
- The combined team IMSIEME exercise provided some benefits and some detriments to a smooth flowing exercise:
 - Benefit A large portion of the exercise was pre-arranged by the IMSIEME exercise coordinators, reducing the requirement for the @fire team to build their own exercise props and streetscapes.
 - Detriment The rigid script for the exercise reduced the effectiveness of a Light USAR team to be agile, more manoeuvrable, and to get to work in a shorter time than a medium or heavy team.
 - Detriment The team participating in the IEC is required to complete the tasks as set by the exercise coordinators and had limited input into the design of the exercise to meet the needs of the Light IEC Checklist. This resulted in some instances of exercise scenarios being of significantly more difficulty and complexity than the required Checklist scenarios.
 - Detriment The 36 hours allowed in an INSARAG IEC has a major impact on a Light team where they only work one shift per day. Although the shifts are significantly long, the down time for fatigue management results in no work activities being undertaken during this period. Although this is the agreed capability of a Light USAR team it is seen as the single biggest detriment for a light team to complete all checklist requirements in two work periods instead of three. Care also needs to be observed by Classifiers when requesting additional demonstration of skills, that will impact directly on the completion of other checklist tasks in the reduced timeframe.
 - Detriment The mobilisation and time required for the team to travel from Germany combined with the scripted arrival times for the teams resulted in the Light team arriving late in the day of 'Exercise day one'. This effectively reduced the two available exercise work periods for the team to complete all tasks.

- The time allowed for a complete IEC/R is based on three work periods of continued operations on one or two work sights (Medium or Heavy teams). Completing a full IEC exercise for a Light USAR team is extremely difficult due to the reduction from three work periods to two periods - to facilitate fatigue breaks for the team. The additional stress on team members, Classifiers and Mentors was evident throughout the exercise.
- The RDC/UCC components proved to be a challenge for the Light USAR team (as it is for many Medium and Heavy teams). The INSARAG guidelines require one person to assist with RDC/UCC operations from a Light USAR team. (Guidelines Manual II, Volume A: 'with the ability to deploy one person to INSARAG support (UCC/RDC) for the duration of the deployment'). The reality of an IEC is that the team needs to demonstrate that they can run an RDC and UCC if required. The time taken to demonstrate the RDC and UCC components during the exercise delayed the other activities that were required of the team. This matter is not limited to Light USAR teams and is also experienced by Medium and Heavy teams during IEC/R exercises.
- All IEC/R teams should consider providing additional exercise participants specifically to staff the RDC and UCC if they are conducting an exercise without additional personnel from other teams. The IMSIEME exercise provided only seven RDC/UCC personnel from the combined three teams to meet the INSARAG minimum standards.
- The reduced time frames for the exercise (only two work periods) required the team to conduct multiple tasks at the same time. While this was a positive initiative for the team to achieve the IEC benchmarks, it also required Classifiers to witness the tasks. With a smaller Classifier team, it will be a challenge to observe multiple activities being undertaken concurrently.
- The Classifier team was very large, with Nine Classifiers, Mentor and the INSARAG Secretariat representative. This is understandable for the first Light Team IEC, and in consideration of the significant impacts of the COVID Pandemic, but future Light IEC/R's would be likely to have less. A classifier cohort of five to six people is considered appropriate.
- As the Light USAR team is multi-skilled, possibly the Classifier team could also be multiskilled (Example: Team Leader/Management; Rescue/Logistics; Medical/Search etc). This may provide a more flexible use of Classifiers also.
- The agile nature of Light USAR teams is that most of the team can be deployed to the field and will have a significantly smaller BoO. This may be unusual for Classifiers who have previously worked with medium or heavy teams where there is always a number of people in the BoO. Classifiers should be aware of the flexibility provided by Light teams and how they may work differently to Medium and Heavy teams.
- UCC Meetings can occur during any work period during 24-hour operations. In the event
 that the UCC meetings are planned to occur outside the work hours of the Light Team
 UCC officer, this Officer will need to alter his/her shift time to ensure they attend the
 UCC Meetings during the IEC. This is a more difficult situation for the Light Team UCC
 Officer, but is necessary to achieve the IEC requirements. Alternatively, the Light Team

UCC Meeting representation can be shared between the Team Leader and Deputy Team Leader throughout the 24-hour period to cover all meeting opportunities.

Observations for considerations from the @fire team and Classifiers

- Light USAR Team IEC's are achievable but should not be seen as an easy way into the Classified team cohort.
- Light USAR teams cost about 70-80% as much as a Medium IEC team, as calculated by the @fire team.
- Breaching and breaking is time consuming for all teams and achieves only a small portion of the checklist. Heavy teams have four crews to achieve, Medium teams have 2 crews, and Light teams have only one crew to achieve this.
- The benefits of a pre-arranged exercise set up and coordination are outweighed by long travel distances to attend the IEC site. This added to the Logistics load for the team but was achieved.
- The exercise site was complex and closely resembled real world scenarios, however several of the tasks were significantly in excess of IEC/R standards, including the concrete breaching requirements for 300mm and 500mm thick concrete instead of the Guideline standard of 200mm.

Recommendations to the INSARAG Team Leaders Meeting

Light USAR teams for IEC have options for how they conduct their exercise. Feedback from the Team, Classifiers and Mentor recommend:

- Light USAR teams should plan and develop their own IEC exercise to showcase the capabilities of their team and meet the INSARAG guidelines. This includes developing the rescue props and exercise time frames to provide the greatest opportunity to complete all tasks in two work periods, while providing fatigue breaks for team members.
- Light teams should provide adequate EXCON personnel to guide the exercise and make the best use of the limited time available. This is no different to all IEC/R teams that have an obligation to manage their own exercise effectively in the limited 36 hour period.
- Light teams participating in IMSIEME or SIMEX exercises will benefit from early
 engagement with exercise coordinators to make the best use of the limited time for the
 exercise over two work periods. This will be enhanced by using embedded team
 EXCON to direct the exercise progress. Light teams that conduct IEC/R exercises as
 part of a SIMEX or similar exercise must have input to the exercise schedule and
 program.
- Light USAR teams may still work alongside Medium and Heavy teams during IEC/R exercises, acknowledging the benefits of collaboration in Field, UCC and RDC

operations. Opportunities for Light teams to engage with medium or heavy teams in complex field operations may also be considered while acknowledging that each team must complete their own specific checklist tasks.

- The time constraints for the light team to complete the IEC requirements were considerable. To effectively manage the limited available time for the light team to complete the IEC in two work periods (instead of three), the following options are recommended:
 - Option 1 Engage the Light team in the exercise early, maybe as the first attending team to give the team an early start in the operational phase of the exercise after they have cleared the RDC. The dedicated RDC/UCC member will progress with the natural development of the RDC/UCC as the exercise progresses. The RDC component can also be demonstrated at the end of the exercise on demobilisation if needed.
 - Option 2 In the event that the Light team arrives late in the exercise (as was the case with the @fire IEC), the exercise may need to be lengthened to provide sufficient time for the team to demonstrate the checklist items, with the acknowledgement that this will impact Classifiers.
- Light USAR teams undertaking IEC/R should consider providing an additional team of RDC/UCC personnel to support the exercise in the early stages (if additional teams are involved in the exercise) or throughout the exercise to ensure that the RDC/UCC requirements can be demonstrated during the exercise. This acknowledges that a Light USAR team is not able to establish and run the complete RDC/UCC, but must contribute one person to it.
- The INSARAG Checklist for Light USAR teams is considered to be appropriate for current and future Light USAR IEC/R's. No changes to the currently approved checklist are recommended.
- In the interim period where new Light USAR IEC teams are developing, it is recommended that a member of the LTQAWG is engaged as a subject matter expert to answer Classifier team questions about the Light USAR IEC concept. This person may make up part of the Classifier team, or may be additional to the Classifier team.
- Heavy and Medium teams that wish to develop a Light USAR team capability will not be required to undertake a full Light USAR IEC, but should develop and exercise their Light USAR capability prior to deployment to self-assess their capability in the Light USAR format and reduced team size.

Provided by:

Brad Commens and Rob Davis; Co-Chairs LTQAWG