

THE #UOET23 ARE ABOUT TO BEGIN!



FINAL DAY OF #U0ET22







► Picture: ÖBH

The third and final day of the Urban Operations Expert Talks began exceptionally not at the Zentrum am Berg, but at the <u>SimCampus</u>, the former hospital of Eisenerz, which is fully equipped and serves as a training facility for emergency forces. The participants of the Urban Operations Expert Talks were given a tour of the simulation hospital and an insight into the special medical training for urban operations by Dr. (MD) Thomas Wegscheider, Head of the Clinical Skills Center at the Medical University of Graz.

After the visit to the SimCampus, the group moved up to the Center on the Mountain, where Mag. Klaudia Tanner, the Federal Minister for National Defense, was received in the afternoon. Mag. Klaudia Tanner was introduced to the research and training activities of the Montanuniversität Leoben in cooperation with the Austrian Armed Forces and was given a guided tour of the tunnel facilities. The mine rescue service demonstrated its skills in fighting a vehicle fire and rescuing an injured person, who was transported away in an emergency ambulance.

The visit by Madam Federal Minister also marked the end of Urban Operations Expert Talks 2022, which was a resounding success, according to feedback from participants:

"A great opportunity to network and socialize in the field of urban operations and especially underground operations."

"Overall, a great experience with many interesting presentations from many fields."

"UOET22 provided me with the opportunity to expand my expertise, knowledge, and communication skills, which will be beneficial in both academic and military settings."

"Incredible opportunity to experience a scientific approach to solving military problems."

The organizing committee of Urban Operations Expert Talks 2022 thanks all participants and wishes a hearty "Glück Auf!" hoping to see you again for Urban Operations Expert Talks 2023!

#UOET22_ONLINE







The second day of the Urban Operations Expert Talks was also quite successful and filled with interesting presentations. To enable distant attendees the participation this day was held as online conference.

During the first session on challenges of urban operations, Dr. Daphné Richemond-Barak gave an overview of the legal dilemmas of underground warfare and Michael Würger, BSc MSc dealt with "Navigation Warfare in Urban Operations" followed by Mag. Michael Lindenthal and Dr. Mike Rennie highlighting the psychological challenges associated with operations in urban environments.

The next session introduced the Urban Operations Support Cell as a group of experts providing three main services to headquarters: specialised military expertise in urban operations, RApid Data Integration and Visualization (RADIV) and specialized civil engineering support thereby



contributing significantly to the decision-making process. MAJ Alexander Pytlar MPA BSc designs urban resilience and stability through the GENETICS framework. Lukas Hager showed how the Rapid Data Integration and Visualization (RADIV) process facilitates digital staff work by easily integrating and visualizing large and heterogeneous data sets into a truly comprehensive Common Operational Picture. The on-site participants had then the opportunity to take a look into the HQ TF NIKE.

The third session dealt with Combat and Service Support in urban operations. CAPT Alex Parker MSc presented on the characteristics of gamma radiation fields in underground infrastructure for health protection and decision making. CAPT Dr. Helmut Aschbacher and Dr. [MD] Peter Kemetzhofer described emergency medical treatment in urban operations.

Finally, Dipl. Ing. Reiner John, Stuart Lyle BA MA and John Spencer presented within the fourth session on different aspects of future technological perspectives of urban operations specifically addressing future decision making in SAR using quantum technology, development and testing a task force for future urban operations, and future prospects for urban operations. Having already heard a great deal about operational requirements in the urban environment, participants followed up with Urban Operations Experience #3, a "tactical walk" through Eisenerz. Abandoned, dilapidated (small industrial) buildings were explored to identify impact and training opportunities. The walk ended with a presentation by Robert Taylor of 4GD, a company specializing in synthetic urban training environments.

On the way to the conference dinner the participants of the Urban Operations Expert Talks were surprised by the <u>"Bergmusik Eisenerz"</u>, who performed, among other pieces, the <u>"Soldaten unter Tage"</u> march at the Bergmannsplatz in Eisenerz showing the international guests Austrian culture.

SUCCESSFUL START OF THE URBAN OPERATIONS EXPERT TALKS







On July 19, the Urban Operations Expert Talks bringing together national and international experts from a wide range of fields to address the topic of operational challenges in urban environments, got off to a successful start.

At the beginning, the participants were able to get an overview of the activities of the NIKE research group followed by Major General Karlheinz Dudek from the Vienna Police who talked about critical infrastructure in urban environments emphasizing how important the contact among the emergency organizations and the knowledge about international methods is. Professor Robert Galler from the University of Leoben presented the "Zentrum am Berg" research and training facility, and took a look at the future of underground infrastructure. During the tour of the tunnels, the Urban Operations Experience #1 evolved, as the mine rescue service had to extinguish a fire in the road tunnel and the participants were shown the training and research opportunities.

The railroad journey with the "Erzbergbahn" took the participants directly into the Urban Operations Experience #2. The journey was briefly interrupted at Präbichl railway station by an incident within the "Training Exercise Eisenerz 22" conducted by Theresian Military Academy. Guided tours of voestalpine and the Gösser brewery showed the #U0ET22 participants the challenges of industrial areas embedded into urban environments - an incident of any kind would have an immediate impact on the surrounding area. This eventful and insightful day came to an end in the premises of the Gösser Brewery with exciting discussions about Experiences # 162...

WORLD PREMIERE







The march "Soldaten unter Tage" (Subterranean Soldiers March), composed by the bandmaster of the Military Music Tyrol, Colonel Hannes Apfolterer, was played in public for the first time. The march was dedicated to all those who have rendered outstanding services to the development of skills for underground operations – a research project of the Military Academy. In particular, the University of Leoben and the Jägerbataillon 18. The head of the research group and head of the Institute for Officer Training, Colonel Peter Hofer, was not only visibly moved by the sounds of the march, but also delighted to be able to hand over the score to Ass.-Prof. Dr. mont. Nina Gegenhuber, representing the Department "Zentrum am Berg" of the University of Leoben, as a sign of thanks for the good cooperation.

IRON NIKE RESEARCH ACTIVITY 2022 HAS STARTED!

Operations in an urban environment are characterized by a high degree of confusion. A clear and truly comprehensive Common Operational Picture (tcCOP) is essential for mission accomplishment! With a bunch of highly motivated experts IRON NIKE Research Activity 2022 is currently working on the improvement of the required capabilities.







THE URBAN OPERATIONS EXPERT TALKS 2022

For many years, the Chair of Subsurface Engineering at Montanuniversität Leoben and the Institute of Advanced Officer Training at Theresian Military Academy have been working closely and very effectively impressively demonstrated in several research projects.

Recent experiences, such as the war in Ukraine or the latent danger of terrorist attacks in Europe, and ongoing urbanization increase the urgency of dealing intensively with military operations in urban environments. Such operations require highly qualified soldiers, sophisticated equipment, and efficient civil-military interaction, which should be supported by



up-to-date expert knowledge.

The "Urban Operations Expert Talks 2022" gather more than 100 experts from different countries - about 40 of them locally - from the academic, technical, economic, military and police sectors to exchange ideas on this topic and discuss possible scenarios and approaches. The main focal theme, "Introducing the Urban Operations Support Cell," is intended to raise awareness of technically sound support in decision-making processes in the context of operations in urban environments.

In addition to the speakers and authors, several subject-specific experiences within real-life urban settings are planned to make the operational environment more tangible.

We are lokking forward three highly interesting days packed with information, lively discussions and thrilling experiences.



THREE MORE WEEKS

THE #U0ET22 ARE ABOUT TO BEGIN SOON

Military operations in urban environments are becoming more and more important. It is



necessary to prepare, educate and support the soldiers in the best possible way to conduct operations in urban environment and to protect critical infrastructure and the population.

Being a part of the IRON NIKE Research Activity 2022, the Urban Operations Expert Talks offer a great opportunity for national and international experts to exchange ideas and experience during presentations, field trips and discussions. The purpose of the #U0ET22 is to strengthen national and international cooperation and create new partnerships in countering today's threats. The Urban Operations Expert Talks are civil-military cooperation at its finest showing collaboration, diversity and success in research and development.

Theresian Military Academy is proud partner of the Montanuniversität Leoben in organising the expert talks, working closely together with research partners and various experts to improve urban operations capabilities.







► What to expect around the bend? (ÖBH/Pezzi)