PAVILION
DINFOS ONLINE LEARNING

LOW-LIGHT OPERATIONS CHECKLIST

Prepare for low-light and night-time situations to effectively document your mission.

While on a mission, you may need to shoot in low-light situations, such as at night or in dark buildings. Shooting in low light is difficult, and you need to have the right gear with you. Don't restrict yourself to only still images when taking a night-time or low-light photo. **Never use a flash since this can give your position away** — it's important to maintain personnel safety and mission security.

Use this checklist to prepare yourself for capturing imagery in a low-light or night-time operation.

- [ ] Perform pre-mission checks on your night vision gear.
  - [ ] Consider using night-vision gear if there is not enough available light.
  - [ ] Check the functionality of all your gear before leaving your unit. Trying to do this in low-light operational conditions can cause irreparable damage and significantly impair your ability to complete your mission.
  - [ ] Check the connections to the camera. There have been many issues with damage to the gold pins that connect the astroscope to the camera.
  - [ ] Be thorough because image quality is dependent on the characteristics of resolution, sensitivity, contrast and distortion.
  - [ ] Know how to adjust the power, IR illumination and focus for your equipment to make sure you can capture the best quality shots.
  - [ ] Experiment and practice before you go out on a mission — low light photography takes time to build proficiency.
- [ ] Avoid using flash.
  - [ ] Use an existing light source if one exists.

- [ ] Use a night-vision kit if no light source exists.
- [ ] Use IR chemlights to provide additional light when using night vision.

- [ ] Adjust the aperture and exposure.
  - [ ] Use a small aperture and a long exposure to avoid overexposure of stationary lights.
  - [ ] Use a large aperture and a short exposure to avoid capturing motion.
  - [ ] Use a fast lens (f1.4-f2.8) to maximize light gathering and reduce shutter speeds.
  - [ ] Adjust your white balance for the type of light you are shooting in, e.g., incandescent, neon, etc. This will help keep your whites and colors true.
  - [ ] Shoot in RAW to capture the greatest details and data for post-processing.
  - [ ] Use a long exposure to allow more light into the camera to capture maximum detail and motion of objects. Be aware: objects that move across the camera will leave a trail.

- [ ] Set the ISO.
  - [ ] Use a higher ISO to optimize the camera performance. A higher ISO groups pixels together to capture more light, which makes picture noise visible.
  - [ ] Do not set the camera on the AUTO option for the ISO. The AUTO option for ISO in low light conditions cannot accurately calculate the appropriate ISO for the conditions, and this will make the images useless.

- [ ] Use the ISO when the situation warrants.
- [ ] Stabilize the camera. Keep it as still as possible to avoid blurring the images.

- [ ] Put the camera on a time delay. This gives you time to move your fingers and not disturb the image.