

AE Safety - X-acto Knife Use

Hazard Description: X-acto knives, sometimes listed as Exacto knives, are commonly used during Aerospace Education (AE) hands-on activities. Human error or improper use can result in personnel injury.

Prior to the activity:

- Check all knives and only use sharp blades. Dull, chipped, or broken blades require more force to perform the cutting operation safely, or they could slip. Change the blade regularly. Only senior members will change the blades. Wear gloves when changing the blade. Test the collar and the new blade to ensure that the blade is secure.
- Ensure that the unit commander is aware of the use of the X-acto knives as part of the activity and concurs with its use.
- Ensure that there are enough safety goggles and gloves available for the activity participants.

At the beginning of the activity, provide a safety briefing:

- Wear safety goggles or glasses when working with X-acto knives. Not only can a piece of cut material enter the eye, but the blades are also brittle and can break under stress.
- Gloves should be worn, either heavy duty leather or metal mesh gloves designed for working with sharp objects
- Use a cutting board or mat placed in a stable surface.
- When cutting, grip the knife with all four fingers and place the thumb on the collar.
- Don't use excessive force when cutting with the X-acto knife. If the member is having trouble cutting, have a senior member replace the blade.
- If possible, secure the material being cut in a clamp or similar device prior to cutting. Otherwise, grip the material behind the cutting blade.
- ALWAYS cut away from the body. Ensure that others are not in the path if the knife should slip.
- Hand a knife to someone else with the handle first.
- Don't use the X-acto knife for anything other than cutting.

After the activity:

- During storage and transport, put the protective cap in place. If a cap is not available, put the knife in a container that will not leave the blade exposed. Be sure to label the container to ensure that others are aware of the contents. Never carry an open X-acto knife in a pocket or place it unprotected in a drawer. Never walk with an X-acto knife that has the blade exposed.
- Dispose of old blades by placing them in a sharps container. Never throw them into the trash. Check with your local laws/ordinances to determine what can be used as a sharps container and label it appropriately.
- Ensure that all X-acto knives are returned.