

Guidelines for Use of PIRANHA

Instructor Lesson Plan

To be completed after viewing the Piranha User Training Video

**Issue No. 2
September 2006**



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Student Lesson:

Before reading these guidelines, WATCH the Piranha User Training Video and READ your agency's Pursuit Policy.

⚠️ WARNING

You or others can be killed or seriously injured if you don't follow safety messages.

Your safety and the safety of others is very important. We have provided many safety messages in this lesson plan. A safety message alerts you to potential hazards and instructs you on how to avoid or reduce the hazard. Each safety message is preceded by a safety alert symbol ⚠️. Please carefully read and follow these important messages.

I. INTRODUCTION

Piranha is one of a series of law enforcement tools, that have been developed by StopTech, Ltd., to assist law enforcement agencies in preventing vehicle pursuits. In the course of this lesson, you will be instructed on methods of deployment for Piranha.

II. LEARNING OBJECTIVES

At the conclusion of this training, each participant should be able to:

1. Describe the basic construction of Piranha.
2. State, orally or in writing, the recommended surface for successful deployment of Piranha.
3. State, orally or in writing the safety and tactical considerations for use of Piranha.
4. State, orally or in writing, the type of vehicle Piranha should **NOT** be deployed against.
5. State, orally or in writing, the various methods of deployment.
6. Demonstrate the proper method for reloading Piranha.

Instructor's Notes:



Piranha

INSTRUCTIONS

Depending upon student participation this lesson should take from **15 to 30 minutes** to complete.

Piranha User Training Video should be utilized in coordination with the Lesson Plan.

Be sure to properly address the information contained in each point of the STUDENT LESSON PLAN. The information that is printed on this portion of the INSTRUCTOR'S LESSON PLAN is meant to assist you in instructing your students.

On the STUDENT LESSON PLAN this portion is blank, and is intended for students to list their personal notes.

TRAINING AIDS

For every 3 persons participating in your class you should have at least one Piranha to use as an instruction aid.

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III. OVERVIEW and NOMENCLATURE

Piranha is a “pursuit prevention” device for use on a stationary target vehicle. If the target vehicle is moved and the tire rides over Piranha, it will result in tire deflation quickly, generally, in approximately five seconds. Potential uses could include any situation when the target vehicle is stationary, such as warrant service, SWAT situations, stake-out of stolen vehicle, or vehicle check point areas.

Piranha is 3 ½ inches (8.9cm) in length and weighs 5.2 ounces (147g). Piranha is comprised of the following components and sub-assemblies:

1. One (1) black polypropylene SHROUD which covers the quills and allows safe handling.
2. Two (2) Teflon® coated hardened steel QUILLS; 3/8 inch (.95cm) in diameter and 2 inch (5.08cm) in length oriented in the cartridge and secured perpendicular to the base.
3. One (1) glass polypropylene CARTRIDGE to which the shroud is secured and which holds the quills in place.
4. One (1) 3 5/16 inch (7.94cm) ABS plastic BASE into which the cartridge is inserted.
5. Two (2) polymer END CAPS which hold the cartridge in the base.
6. Four (4) fastening SCREWS to secure end caps.

IV. DEPLOYMENT OF PIRANHA

⚠ ALWAYS follow the policies and procedures of your Agency when deploying Piranha.

Piranha training materials are intended to supplement the formal Pursuit Policy of your agency. StopTech, Ltd. recommends that these “Guidelines For Use” be incorporated into your agency’s written Standard Operating Procedures (SOP). However, the training, policies, and procedures of your agency – including when and how to deploy Piranha – supersede any written or verbal instructions from StopTech, Ltd.

TRAINING AIDS (con’t)

You will also need:

1. A STUDENT LESSON PLAN for each participant of the class.
2. Piranha User Training Video.
3. Copies of your department’s or agency’s pursuit policy – provide one copy for each student.

Optional items:

1. Dry erase or chalk board to draw examples of potential deployment circumstances.
2. An automobile for deployment demonstration purposes.
3. TV and VCR or DVD player.

As you address points 1 through 6, hold up a Piranha for all to see. Depending on the class size, pass around one or more Piranhas for the students to handle for themselves.



Exploded View

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Instructor's Notes:

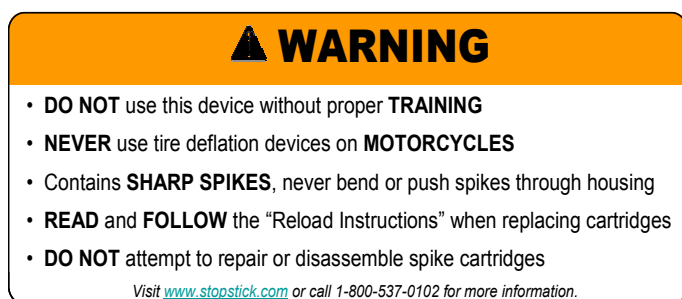
A. Before Deploying Piranha

Before deciding to deploy Piranha, many factors must be considered. The following are some important safety and tactical issues to think about.

Safety Considerations:

The circumstances of each pursuit are very different, but safety is always the most important factor.

The following warnings appear on every Piranha and should ALWAYS be kept in mind when using Piranha:



In addition to the product label warnings, ALWAYS keep the following important safety considerations in mind when using Piranha:

▲ RESTRICT PEDESTRIANS. Bystanders, observers and other pedestrians in the surrounding area are especially vulnerable to injury if they are struck by a vehicle. NEVER deploy Piranha with pedestrians in the immediate vicinity.

▲ NEVER use Piranha on vehicles with fewer than four wheels. Vehicles such as motorcycles and 3-wheeled ATVs are less stable and persons driving these vehicles are more likely to lose control when their tires deflate.

▲ ONLY deploy Piranha when you have a safe location to observe the target vehicle. You could be struck if suspects unexpectedly swerve, stop, or lose control of their vehicle. You must be able to safely observe the target vehicle and other traffic.

As you review the safety and tactical considerations for deploying Piranha, refer to your agency's pursuit policy. Note any differences and instruct students to ALWAYS follow the policies and procedure of your agency.

StopTech Ltd., strongly encourages you to provide each student with a printed copy of your existing pursuit policy, while attending this training session.

Safety Considerations:

This is a good time during the training to talk about the important safety considerations in using Piranha.

Handle Piranha with caution.

Avoid deploying Piranha:

- in areas with heavy traffic.
- in populated areas or locations with pedestrians nearby.
- on vehicles with less than four wheels.

Following these precautions (i.e., limiting TRAFFIC and PEDESTRIANS) can reduce the likelihood of injuries – if a driver were to lose control of the vehicle and crash.

Discuss the types of vehicles that Piranha CANNOT be used against; specifically, any vehicle with less than four (4) wheels.

Only deploy Piranha when you have a safe location to observe the target vehicle.

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⚠ CONSIDER that the driver may attempt to continue operating the target vehicle after deployment of Piranha. Vehicles with one or more deflated tires may still be operated. In this event, the driver may lose control of the vehicle while attempting to operate it with one or more deflated tires, potentially endangering you, pedestrians and other motorists.

Tactical Considerations:

Before deploying Piranha, you should consider the following:

1. What is the likelihood that the person approaching the target vehicle will see Piranha and how might the person react?
2. If detection of Piranha is a concern, then placement should be on the passenger side of the vehicle.
3. Multiple Piranha may be used in situations where the vehicle could be moved either backward or forward.
4. After deploying Piranha, position yourself in a safe location away from the point of contact between the target vehicle and the deployed Piranha.

B. Deploying Piranha

To deploy Piranha, the following guidelines apply:

1. Piranha may be deployed on paved surfaces, soft ground, gravel or sand surfaces.
2. Place Piranha approximately 6 inches (15cm) from the target vehicle tire.
3. The grooved ABS plastic base must be placed face down against the road surface.
4. If it appears possible that the target vehicle could depart by going forward or backward, be sure to place Piranha on each side of the target vehicles' tire(s).

Instructor's Notes:

Safety Considerations (con't)

Consider that the driver may attempt to continue operating the target vehicle after deployment of Piranha and the dangers this poses.

As a class, talk about different scenarios and the circumstances of pursuits that make it dangerous or inappropriate to deploy Piranha.

ASK: Who could be hurt? Why? What are the potential consequences of a suspect losing control of his vehicle?

Be sure to stress choosing a location that allows for **OFFICER SAFETY** and **MANEUVERABILITY** after deploying Piranha, as well as the safety of bystanders, pedestrians and other motorists.



Tactical Considerations

Stress the importance of officer safety.

Considerations before deploying Piranha:

- type of deployment surface
- suspect has limited ability to avoid striking the device
- what is the likelihood that the person approaching the target vehicle will see Piranha and how might the person react.

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Instructor's Notes:

C. After Deploying Piranha

If Piranha **was struck** by any vehicle:

- refer to reload instructions included with each Piranha.
- contact StopTech, Ltd. at 513 202 5500 to order a Piranha Hit Kit if no replacement cartridges are available.

If Piranha **was not struck** by any vehicle:

- inspect Piranha for damage.
- return Piranha to your selected storage area for the next deployment situation.

V. CARE AND MAINTENANCE

With reasonable care, your Piranha will be ready to aid you in preventing or terminating a pursuit that creates a hazard to you and the public.

Follow these simple guidelines to ensure your Piranha is ready for use:

- Keep Piranha separate from other equipment to prevent inadvertent contact that could damage Piranha or other equipment.
- Store Piranha in a location that is easily accessible for rapid deployment.

VI. CONCLUSION

Piranha can allow you to prevent a pursuit before it starts; thus avoiding the potential of a pursuit that could endanger you, the public, and the fleeing suspect.

Tactical Considerations (con't)

- after deploying Piranha, position yourself in a safe location away from the point of contact between the target vehicle and the deployed Piranha.

The question may arise about using STOP STICK in a stationary situation. Explain to the class that due to the different dynamics of a tire in motion versus a tire starting into motion STOP STICK and Piranha are constructed differently. STOP STICK is a slow deflation device – 20 to 30 seconds; Piranha will deflate a passenger vehicle in approximately 5 seconds

The quills and tips of STOP STICK are oriented at approximately a 45 degree angle, whereas on a properly deployed Piranha the quills point straight up from the base of Piranha.



Piranha Reload

This would be an appropriate time for the instructor to demonstrate how to disassemble, reload and reassemble Piranha; reference reload instructions.

ASK: Are there any questions?

Take a moment to answer any questions from the class.

After completing the lesson plan, have all participants go to a controlled area (i.e., parking lot, large room, etc.) to demonstrate their proficiency in safely deploying Piranha.