

# PBC Application News



## Border Patrol and SWAT Get More Durable Gun Port

The US Border Patrol and SWAT work in a vast array of environments ranging from extreme heat to extreme cold. They also encounter many other different types of obstacles such as unstable terrain and dirty surroundings. Pacific Bearing company supplied them with a reliable and unflinching bearing that could withstand the harsh environments that they would encounter.

### Setting the Scene

A manufacturer of armored vehicles for SWAT and Border Patrol use needed a reliable bearing that would withstand the heat of the desert and cold of winter. The application was a manually operated, spring loaded armored shooting port.

The law enforcement member would open the port from the inside, pushing and turning the cover plate to allow him/her to see out. For armored protection from the outside, simply turning would allow the spring to close the port.

### The Challenge

PBC was faced with designing a reliable bearing that could withstand several different harsh environments that the application was sure to encounter. Previous design used a polymer bushing that got softer and deformed in the heat or cracked in severe cold.

### The Solution

PBC came up with using the special Simplicity® bearing with FrelonGOLD® liner. The Frelon liner and aluminum shell are proven technology in extreme environments and temperatures. Those characteristics made Simplicity™ the ideal solution.

### Products Used

The products PBC implemented were special Simplicity® bearing with FrelonGOLD® liner. The hardened steel pin and spring forces seen dictated the use of FrelonGOLD®. Simplicity was the only technology considered, given the application.



888-839-5693

[www.pbclinear.com](http://www.pbclinear.com)