

**Fifty Caliber Armor Piercing Military Ammunition
in the United States Civilian Market**

Prepared for:

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EXECUTIVE SUMMARY

Among the most destructive and powerful ammunition available in the United States today is armor piercing ammunition for long-range fifty caliber sniper weapons. This ammunition is capable of piercing armor-reinforced vehicles, puncturing bullet-proof and ballistic glass, and igniting and exploding armored targets that contain flammable liquids such as gasoline or aviation fuel. The ammunition can inflict this damage when fired at a distance of over a mile.

Fifty caliber armor piercing ammunition has little, if any, legitimate sporting or recreational use. The ammunition is designed for military uses, such as destroying vehicles, aircraft, and bunkers at long range. Indeed, one leading manufacturer of fifty caliber ammunition stated: “The armor piercing, incendiary, and tracer type bullets are used by the police and military Our company does not sell these to the general public because they have no sporting application.”

This minority staff report investigates the availability of armor piercing fifty caliber ammunition in the United States. It was prepared at the request of Rep. Rod Blagojevich, the Ranking Minority Member of the Subcommittee on National Security, Veterans Affairs, and International Relations, and Rep. Henry A. Waxman, the Ranking Minority Member of the Committee on Government Reform. The report incorporates the results of an investigation into fifty caliber ammunition by agents from the Office of Special Investigations of the United States General Accounting Office, as well as the findings of a previous minority staff report on fifty caliber sniper weapons.

The report finds that U.S.-made armor piercing fifty caliber ammunition is readily available in the United States and that this widespread availability is directly attributable to the little-known Conventional Demilitarization Program within the Department of Defense. Under this program, the Department of Defense pays a U.S. company to take possession of surplus fifty caliber armor piercing ammunition. This company then refurbishes and sells a portion of this ammunition to the civilian market in the United States. In the year ending in March of 1999, over 100,000 rounds of military surplus armor piercing ammunition were sold in the United States civilian market under this program.

The sale of armor piercing ammunition in the civilian market poses a threat to public safety. GAO investigators have traced fifty caliber sniper weapons to suspected terrorist groups, drug cartels, doomsday cults, and a mentally ill cop killer. Moreover, an undercover investigation by GAO revealed that dealers who sell this military surplus ammunition employ an “ask no questions” approach under which armor piercing fifty caliber ammunition could be purchased for suspect purposes. Posing as potential customers, GAO agents found that armor piercing fifty caliber ammunition was readily available from ammunition dealers. As tape recordings of the conversations reveal, the ammunition continued to be offered for sale to the GAO agents even after the agents informed the dealers that they wanted ammunition capable of piercing an armored limousine or “taking down” a helicopter.

I. INTRODUCTION

A. Background on Long-Range Fifty Caliber Sniper Weapons

Long-range fifty caliber sniper weapons are extraordinarily destructive and powerful weapons. They weigh approximately 28 pounds, and they fire large ammunition with a diameter of ½ inch (or “.50”) and lengths of three to six inches. These weapons are “accurate” up to 2,000 yards, meaning they will strike the intended target within this range. They are “effective” up to 7,500 yards, meaning that, although accuracy cannot be guaranteed, the round can strike a target at this distance. Their effective range of 7,500 yards is equivalent to 75 football fields lined up end to end—a distance of over four miles.

Fifty caliber sniper weapons have important military applications. Although bolt-action fifty caliber weapons have been available in the United States for some time, a new semi-automatic version was developed in the 1980s and saw extensive use in the Persian Gulf War. This weapon provided the United States military with the capability to destroy vehicles, aircraft, and bunkers at long range. A description in *Sniper: The Skills, the Weapons, and the Experiences* provides an example of how the U.S. military took advantage of its tremendous firepower:

The Barrett M82A1 was used in the Gulf War; a hundred rifles were rushed to the Marine Corps in time to see action in the desert. In one engagement, Sergeant Kenneth Terry of 3rd Battalion, 1st Marines, hit and knocked out an Iraqi BMP armoured personnel carrier with two armour-piercing incendiary rounds at a range of 1100 metres. At the loss of the Iraqi vehicle the other two BMPs in the patrol promptly surrendered to the American forces.¹

In addition to enabling individual soldiers to engage enemy vehicles and personnel carriers, the fifty caliber weapon has been promoted as an anti-personnel tool in circumstances in which enemy positions are not even visible. According to another military expert:

It's the .50's tremendous ability to penetrate bunkers and buildings that makes it so deadly, as reflected by the penetration data This means you can pulverize enemy positions and induce casualties without necessarily seeing an enemy soldier. When firing at positions, don't be thrifty; riddle them with enough bullets to ensure damage.²

¹Adrian Gilbert, *Sniper: The Skills, the Weapons, and the Experiences*, 214 (1994).

²Maj. John L. Plaster, U.S.A.R. (ret.), *The Ultimate Sniper: An Advanced Training Manual for Military & Police Snipers*, 222 (1993).

Although they are powerful military weapons, fifty caliber weapons are readily available in the civilian market through gun stores and the Internet. GAO examined records from the Bureau of Alcohol, Tobacco, and Firearms from companies manufacturing the fifty caliber rifle between 1987 and 1998. These records show that the largest manufacturer, the Barrett Company, manufactured and sold over 2,800 fifty caliber rifles in the civilian market during this period. The majority of these weapons, over 2,200, were sold after the Gulf War. Under current law, there are fewer restrictions on sales of fifty caliber weapons than on handguns.³

The GAO investigators further found that fifty caliber sniper weapons have been linked to suspect organizations and individuals. As part of its investigation, GAO traced the origins of 28 semi-automatic fifty caliber weapons. GAO reported that these weapons have been found at the scene of many criminal activities. In particular, the GAO investigators discovered examples of criminal misuse of fifty caliber weapons in connection with known domestic and international terrorist organizations,⁴ religious cults,⁵ international and domestic drug traffickers,⁶ and violent criminals.⁷ Additional information about fifty caliber sniper weapons is contained in a prior minority staff report entitled “Long-Range Fifty Caliber Sniper Weapons” issued on May 3, 1999, and is available on Rep. Waxman’s webpage.⁸

³Gun dealers can sell fifty caliber weapons if buyers present identification showing they are at least 18 years old and have not been convicted of a felony. In comparison, purchasers of handguns must show that they are at least 21 years old. In addition, there are no restrictions on sales of second-hand fifty caliber weapons and, unlike handgun regulations, there are no federal restrictions on minimum age of possession.

⁴One trace led the investigators to seven suspects involved in an alleged plot to assassinate Fidel Castro by shooting down his airplane using two semi-automatic fifty caliber weapons. The suspects were arrested by the U.S. Coast Guard in the Caribbean and indicted by a federal grand jury. Additional pending cases include several terrorist organizations attempting to smuggle overseas fifty caliber weapons purchased legally in the United States.

⁵The GAO investigators found a case in Montana in which members of a doomsday religious cult had built underground bunkers and acquired hundreds of weapons and thousands of rounds of ammunition to prepare for the end of the world. ATF agents investigating the cult found ten semi-automatic fifty caliber rifles purchased with false identifications. The cult members were convicted of federal firearms violations. In another case, ATF combined efforts with the IRS to investigate a survivalist/tax protester in Georgia who had stockpiled over 100 different firearms. Two of these weapons were Barrett semi-automatic sniper rifles the suspect was able to purchase with a false identification.

⁶The GAO investigators found numerous examples of fifty caliber weapons being confiscated during the execution of drug warrants in the United States. They also reported that a fifty caliber semi-automatic weapon was recovered by Mexican law enforcement authorities in the aftermath of a shoot-out between members of an international drug cartel in Sinaloa, Mexico. This weapon was traced to an original purchaser in Wyoming.

⁷GAO investigators tracked down a fifty caliber weapon seized at the home of a mentally ill suspect who shot a police officer responding to a domestic complaint in Michigan. Police found the weapon among 15 other firearms inside the killer’s home, although the gun used in the killing was not a fifty caliber weapon. Investigators concluded that, despite his mental illness, the killer purchased the rifles legally because he had no prior felony convictions.

⁸See <http://www.house.gov/waxman>.

B. Background on Fifty Caliber Armor Piercing Ammunition

The power and destructiveness of fifty caliber sniper weapons can be dramatically enhanced by the use of specialized armor piercing and armor piercing incendiary ammunition. With this ammunition, fifty caliber sniper weapons can pierce several inches of metal, explode on impact, or provide tracers to increase accuracy for night shooting.

The standard ammunition for the fifty caliber rifle is the “ball” round, which has no specialized tip color. The “ball tracer” round, with its brown or dark orange tip, releases a substance as it travels through the air so its trajectory can be traced. Tracer rounds are used to increase accuracy during shooting at night. They often are used in conjunction with nontracer ammunition, however, since they reveal the shooter’s position as well as the round’s trajectory.

“Armor piercing” or “AP” ammunition was developed for special military applications. Normally identified by its black tip, AP rounds are reinforced and can penetrate substances more deeply than other types of ammunition. AP ammunition is designed specifically for use against armored targets. Armor piercing ammunition can be enhanced further with gun powder that ignites upon impact. This “armor piercing incendiary” or “API” ammunition has a silver tip and is designed for use against armored targets that contain flammable liquids, such as gasoline or aviation fuel. “Armor piercing incendiary tracer” or “APIT” ammunition, as evident from its name, includes all of the elements above—armor-piercing capacity, incendiary effect, and tracer ability. APIT has a silver and red tip.

On April 28, 1999, the United States Marine Corps Scout Sniper School invited the minority staff to their training facility in Quantico, Virginia, to see a demonstration of the fifty caliber weapon. During this demonstration, the Marine instructors discussed the destructive power of several fifty caliber rounds.⁹ They showed how armor piercing rounds penetrated one inch thick rolled homogeneous armor found on armored vehicles throughout the world, a three and a half inch thick steel manhole cover, a two inch thick steel track from a tractor, a piece of three quarter inch bullet-resistant glass, and four cinder blocks with three quarter inch walls laid end-to-end. Finally, a Marine shooter fired multiple shots in rapid succession completely through a six hundred pound safe.¹⁰

⁹During this demonstration, the Marine instructor identified additional types of fifty caliber ammunition, including the following:

BMG: This fifty caliber “browning machine gun” round is a 660 grain bullet fired at 2800 feet per second.

M8 API Round: This round provides armor piercing and incendiary effects against lightly armored targets.

SLAP Round: The “Sabot Light Armor Penetrator” round has a plastic shoe that is discarded as the round is fired. A tungsten carbide dart continues on at over 4000 feet per second to penetrate armored targets.

Raufoss Round: The Mark 211 Mod-0 Raufoss round provides armor piercing and incendiary effect inside a target. This green and silver tipped round includes an incendiary mixture that forms a cone as it is fired.

Behind the cone is Composition A4 for high explosive effect and Zirconian particles for sustained burning.

¹⁰A video of the Marine Corps demonstration is available on Rep. Waxman’s webpage (see <http://www.house.gov/waxman>).

Even manufacturers and dealers admit that there is little, if any, sporting or civilian use for these specialized fifty caliber rounds. For example, James A. Schmidt II, President of Arizona Ammunition Inc. and a member of the Board of Directors for the Fifty Caliber Shooters Association, wrote Reps. Blagojevich and Waxman on April 28, 1999, that:

The armor piercing, incendiary, and tracer type bullets are used by the police and military. Those available to the consumer are generally surplus. Our company does not sell these to the general public because they have no sporting application.

Mr. Schmidt also gave testimony before Democratic members of the Government Reform Committee on May 3, 1999, that he could envision no sporting or other civilian use for incendiary rounds:

I have no interest in them, no interest in SLAP rounds, incendiary rounds. They have a specific military and police application. We will make those on request for those agencies that have legitimate use for them. But in the civilian market, they're a novelty. They're hard on the guns and we tell them that when they want to buy them. Why would you want to shoot something that's on fire going down the barrel of a gun you just paid \$6,000 for, and they quickly change their mind because they start realizing that it's not a real smart thing to do. I believe that. I say that from the heart. I don't know why you would want to shoot one of those.¹¹

Despite its firepower, fifty caliber ammunition is virtually unregulated. A federal license is not required to sell fifty caliber ammunition unless firearms are sold as well. Anyone over the age of 18 may purchase this ammunition without a background check, and there is no federal minimum age of possession. Purchases may be made over the counter, by mail order, or by fax, and there are no federal requirements that dealers retain sales records.

¹¹Mr. Schmidt also said on May 3 that he had been informed that some competition shooters prefer an armor piercing round "because of its accuracy." An ammunition dealer in Nebraska, however, disputed the claim that AP rounds were the most accurate. Instead, the Nebraska dealer told a GAO investigator that a solid brass sniper round with a "poly" coating provided "the best accuracy you can get" from a fifty caliber weapon.

II. HOW MILITARY SURPLUS ARMOR PIERCING AMMUNITION IS DISTRIBUTED FOR CIVILIAN USE

Although fifty caliber armor piercing ammunition is extraordinarily destructive and has only marginal, if any, civilian use, it is widely available in the civilian market. To determine how this ammunition makes its way into civilian hands, Reps. Blagojevich and Waxman asked the Office of Special Investigations within GAO to investigate the manufacture and distribution of fifty caliber ammunition. This investigation showed that over 100,000 rounds of this ammunition were transferred from the military to the civilian market over the past year. In effect, the investigation showed that the U.S. military is indirectly arming civilians with some of the most powerful and destructive ammunition currently available.

Under the Conventional Demilitarization Program within the Department of Defense, DOD pays a U.S. company to take possession of its surplus fifty caliber ammunition. This company then refurbishes and resells hundreds of thousands of rounds of this ammunition, much of which is distributed in the virtually unregulated civilian market. The process that results in DOD paying a company that refurbishes and resells fifty caliber armor-piercing ammunition is little known and involves several steps.

As a first step, DOD “demilitarizes” rounds that fall into one of three categories: unserviceable, excess, or obsolete. “Unserviceable” ammunition is defective or damaged and cannot be used. “Excess” ammunition includes rounds that are not needed in the near future or are occupying needed storage space. “Obsolete” ammunition is no longer being used for training or wartime exercises or no longer services operable weapons systems.

DOD then offers ammunition categorized as “excess” by one branch of the military to other branches. DOD also offers “obsolete” ammunition to foreign militaries.

DOD reports any remaining rounds on a “B5A Demil” account. DOD then pays the Talon Manufacturing Company located in Paw Paw, West Virginia, to take possession of the remaining demilitarized ammunition. Under the terms of an exclusive arrangement, DOD pays Talon \$1 per ton of ammunition. DOD also pays to ship the rounds to Talon’s plant in Herdon, West Virginia. DOD does not sell any of this ammunition directly to the public.

DOD generates far more fifty caliber ammunition than can be refurbished and resold by Talon. As a result, when Talon receives the ammunition, it dismantles about 98% of the rounds for scrap. During this process, the brass casings and projectiles are melted and the gunpowder is used to create an explosive used in road construction.

Talon is, however, able to find a resale market for hundreds of thousands of rounds of fifty caliber ammunition that it receives from the military. These rounds are dismantled and reassembled for resale. Talon discards the primer, separates the projectile for inspection, and inspects and polishes the casing. Talon then ships these separate components from its Herdon plant to its headquarters in Paw Paw, West Virginia, where it reassembles them with new primers.

After it reconstructs the demilitarized ammunition, Talon offers it for sale to domestic and foreign military and civilian buyers. Sales in the domestic civilian market made up almost half of the 419,000 fifty caliber rounds sold by Talon during the year ending on March 1999. Of these, over 100,000 rounds had armor piercing and incendiary capabilities.

Talon sells its refurbished military surplus ammunition in 100-round belts that mix tracer and nontracer ammunition in a ratio of four to one. Sales in the twelve months between April 1998 and March 1999 in the domestic civilian market are summarized in Figure 1. These sales included 110,000 API and APIT rounds (four API rounds to each APIT round), 56,000 ball and ball tracer rounds (four to one), and 15,000 ball tracer and APIT rounds (four to one). Table 1 shows civilian sales by the capacity of the round for the period from April 1998 to March 1999. In total, 113,000 API rounds were sold in the domestic market during this period.

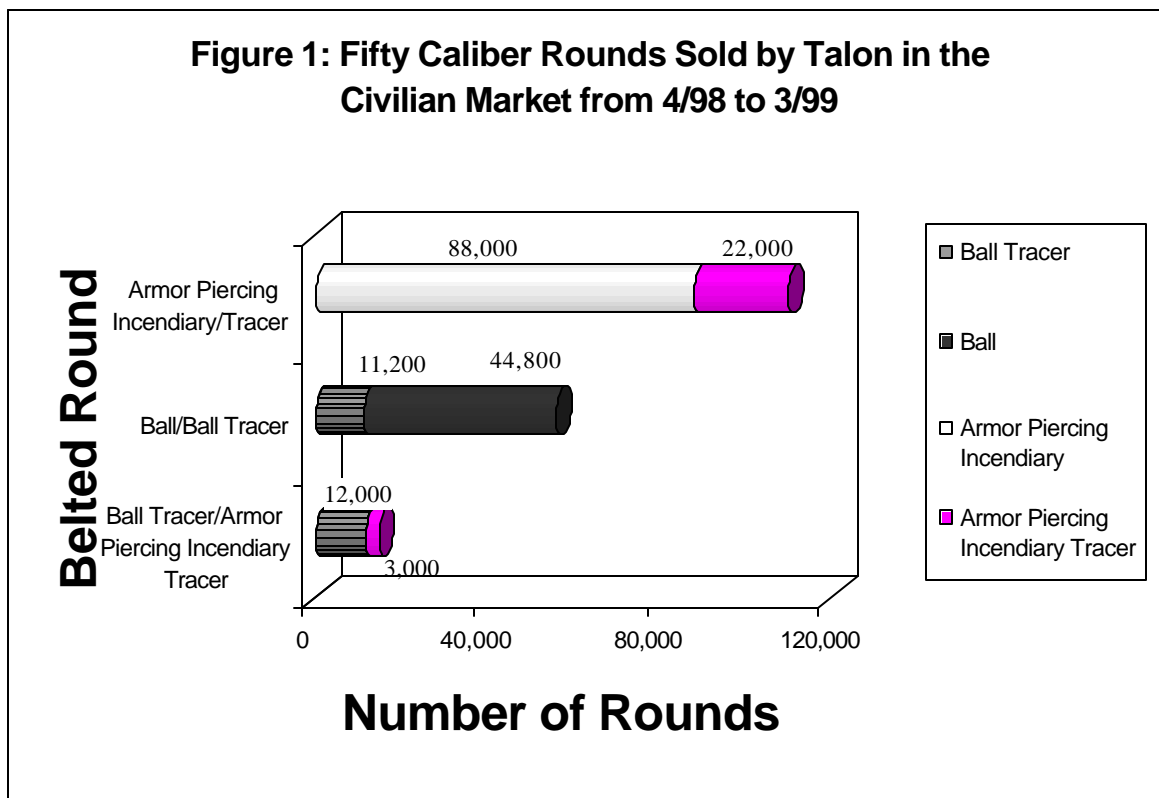


Table 1: Fifty Caliber Rounds Sold by Talon in the Civilian Market from 4/98 to 3/99 by Capacity of Round

CAPACITY	ROUND	QUANTITY
Rounds with Ball Capacity	Ball	44,800
	Ball Tracer	23,200
	SUBTOTAL	68,000
Rounds with Armor Piercing Incendiary Capacity	Armor Piercing Incendiary	88,000
	Armor Piercing Incendiary Tracer	25,000
	SUBTOTAL	113,000
TOTAL		181,000

In addition to selling 181,000 refurbished military surplus rounds in the civilian market, Talon also sold an additional 238,000 rounds to military customers, such as the Brazilian and Colombian militaries. These sales are shown in Table 2. Talon's deals with military customers also included sales of 35,000 rounds to the U.S. military, meaning that the U.S. military repurchased ammunition it previously discarded.

Table 2: Fifty Caliber Rounds Sold by Talon in the Military Market from 4/98 to 3/99

CUSTOMER	TYPE OF ROUND	QUANTITY
Brazilian Military	Armor Piercing	200,000
Colombian Military	Armor Piercing Incendiary	3,000
United States Military	Ball	35,000
TOTAL		238,000

III. THE WIDESPREAD AVAILABILITY OF ARMOR PIERCING AMMUNITION IN THE CIVILIAN MARKET

As part of their investigation, GAO agents went undercover to assess the availability of armor piercing fifty caliber ammunition. This investigation showed that military surplus ammunition is widely available.

First, GAO agents contacted weapons dealers in Delaware, Maryland, Pennsylvania, Virginia, and West Virginia. GAO found that these dealers were willing to sell armor piercing fifty caliber ammunition. According to GAO, the dealers in Delaware, Pennsylvania, and West Virginia informed the agent that purchasing these kinds of ammunition was not subject to any federal, state, or local restrictions. The dealer in Virginia told the agent that this specialized ammunition was illegal to sell or possess in that state. The dealer in Maryland said he would sell such ammunition only to Maryland residents. Although the investigator told the dealers in Delaware, Pennsylvania, and West Virginia that the investigator was a Virginia resident, none of the other dealers warned the agent about Virginia's restrictions.

An undercover GAO agent also telephoned several ammunition dealers that advertised specialized ammunition over the Internet. The agent called ammunition dealers in Alaska, Nebraska, and Oregon and recorded conversations in which he purported to be a customer interested in buying ammunition for shipment to Washington, D.C., or Virginia. The agent found that he could secure the purchase of specialized ammunition from any of the three dealers within a matter of minutes.

The dealers in Nebraska and Oregon stated that they could make the transaction when the agent faxed a copy of his driver's license with a signed statement that he was over 21 and was violating no federal, state, or local restrictions on the purchase. Although the agent said he was from Virginia, which bans this type of ammunition, neither dealer expressed reservations about selling the ammunition to a Virginia resident. According to the GAO investigator, the dealer in Alaska said he had 10,000 rounds of armor piercing ammunition and would sell the ammunition to the investigator. However, the Alaska dealer said the investigator would have to pick up the ammunition in Alaska because UPS Ground did not ship goods from Alaska to the lower 48 states.

The GAO investigator taped the conversations with the three ammunition dealers. These conversations reveal that the ammunition dealers employ an "ask no questions" approach. They were willing to sell military surplus ammunition without restriction even after the investigator said he wanted the ammunition shipped to his work address in Washington, D.C., and needed it to pierce an armored limousine or, theoretically, to "take down" a helicopter.

One of the dealers that GAO contacted was Cascade Ammo, in Roseburg, Oregon. Cascade Ammo is one of Talon's three largest civilian customers of refurbished military ammunition. Although this dealer initially expressed reservations about shipping armor piercing ammunition to Washington, D.C., the dealer ultimately agreed to allow the sale.¹² When asked about the power of the ammunition, the Oregon dealer said he believed armor piercing ammunition would penetrate an armored limousine, as the following interchanges indicate:

Agent: I'm very much interested to making sure that these rounds can go through like, the bullet-proof glass. Do you think they'll go through bullet-proof glass?

...

Dealer: Well, in the old days, in the old [inaudible], they used 700 grains, 720 or something. But nowadays they use 660, so they're getting a little more velocity out of it. And, I just can't see glass standing up to that.

Agent: How about an armored limousine?

Dealer: Yeah, you're using it to test it?

Agent: Well, I...

Dealer: Because we have some people who are testing armored cars. Like 30-06 AP rounds.

Agent: Well, I... these would be a lot... theoretically the .50 cal should be a lot stronger than a 30-06. . .

Dealer: Right, right.

Agent: AP.

Dealer: Right... So it should go through.

Agent: Well, yeah, I guess you say testing against armored limousines... Yeah, I'll be testing against armored limousines. But, but it's gotta work.

Dealer: Right.

The Oregon dealer also was confident the ammunition could "take down" a helicopter:

Agent: Right. And then, if I theoretically wanted to use these rounds to take down an aircraft, say either a helicopter or something like that, I should be able to take a helicopter down, shouldn't I?

Dealer: Yeah, they're not armored. They're not armored to a point that it would stop. If you look at, uh, a military helicopter that's been through, uh, like the ones that came back from Vietnam, they've got, uh, little plates of metal where they weld up the bullet holes. They just take a little piece of metal and they just weld over the bullet holes. It makes the guy, the next guy, feel more comfortable when he's in there.

Agent: I guess so.

Dealer: (laughing) You don't want to see a bullet hole in there.

Agent: Okay.

Dealer: So, yeah, it'll go through any light stuff like that.

¹²The dealer in Oregon was hesitant to ship ammunition to Washington, D.C., because he was not sure if this was legal. He suggested that the undercover agent contact the local U.S. attorney. Later in the conversation, however, the dealer agreed to ship the ammunition if the agent faxed a message saying that the U.S. attorney said it was "okay" to ship the ammunition:

Agent: Okay. If they tell me it's okay, I can just, when I send you this fax message I can say it's okay?

Dealer: Yeah. Yeah. So just check on that, make sure it's okay.

The final interchange with the Oregon dealer included the following passages:

Agent: Good. You know, I'm very happy to see that we'll be able to do business here, because, I'm a little bit concerned, because here on the East Coast when you go to buy ammunition—these large, heavy-duty .50 cal—they ask a lot of questions.

Dealer: Oh.

Agent: And I don't like people asking me questions why I want this ammunition.

Dealer: Well, see, they use them out here for hunting.

Agent: Um huh. Well, you could say I'm going to be using this for hunting also, but just hunting of a different kind.

Dealer: (*laughing*) As long as it's noth-nothing illegal.

Agent: Well, I wouldn't consider it illegal.

Dealer: Okay. Alright.

The conversations with the other ammunition dealers were similar. For example, the dealer in Nebraska assured the agent that this ammunition would go through metal, an armored limousine, and bullet-proof glass. Later in the conversation, the agent and the dealer discussed whether ordinary “sniper round” ammunition or specialized armor piercing incendiary ammunition would best meet the agent's need “to be using this against . . . an armored limousine and something with ballistic glass.”

During the agent's other conversation, the dealer in Alaska claimed his armor piercing ammunition would “go through six inches of steel up to a 45 degree angle at a thousand yards.” When the agent explained that it was very important for him to “defeat an armored-type vehicle,” the dealer responded that “when them cattle carts come running down your drive, you'd better be able to stop it.”¹³ The agent responded by saying, “Exactly, but you know, you can think who drives in armored limousines, that's why I'm going to need it someday, those people in armored limousines.” Audio tapes of these conversations are available on Rep. Waxman's webpage.¹⁴

¹³The mention of “cattle carts” apparently refers to the vehicles used by ATF personnel in Waco, Texas, during the service of the search warrant against David Koresh.

¹⁴ See <http://www.house.gov/waxman>.