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# Bureau of Alcohol, Tobacco, Firearms & Explosives Requirements and Update

Blasting and Explosives Safety  
Training (BEST) Conference 2011  
Crazy Horse, SD



# Overview

- Inspection and Regulations Review
- Recent Changes/Current Projects
- Security/Thefts
- Common Violations

NOTE: This outline was developed as a guideline for presentation by an ATF regulatory official. For regulatory requirements and guidelines, you should consult <http://www.atf.gov/publications/download/p/atf-p-5400-7.pdf> or contact your local ATF office: <http://www.atf.gov/field/>



# General Information about ATF Inspections

- Generally conducted during business hours
- Usually unannounced
- Can be during any time of year
- Vary in length of time
- Often involve more than one IOI



# Primary Areas of Inspection

- Opening Conference
- Licensing/Permitting
- Recordkeeping
- Storage
- Conduct of Business
- Security and Internal Controls Evaluation
- Closing Conference



# Recordkeeping Requirements

- 5-Year retention period
- Records of acquisitions and disposition
- Limited Permittee Transaction Record
- Daily summary of magazine transactions
- Theft or Loss Report



# Records of Acquisition and Disposition

- Separate records of explosives acquired and explosives disposed
- May use distributor invoices, provided they contain all information required by regulations



# Daily Summary of Magazine Transactions

- A separate record of magazine transactions must be maintained for each magazine
- Maintained at each magazine or at a central location on the premises
- Entries must be made no later than the close of the next business day



# Form 5400.5 – Theft/Loss of Explosives

- 1-800-461-8841
- Must be reported within 24 hours of theft or loss
- Penalties for failure to report theft include a \$10,000 fine, imprisonment for not more than 5 years, or both



# Storage Inspection

## IOI's will:

- Ensure that explosive materials are stored in appropriate magazines
- Examine each magazine to ensure compliance with housekeeping, construction, and locking standards
- Perform either complete inventory or spot-check to verify accuracy of daily summaries and acquisition and disposition records
- Measure distances between magazines, highways, and nearby inhabited buildings to ensure compliance with tables of distances



# Type 1 Magazine Construction

Permanent structure for storage of high explosives

Must be:

- Bullet-resistant
- Fire-resistant
- Weather-resistant
- Theft-resistant
- Ventilated





# Type 1 Magazine Construction

## Examples

- Masonry wall - 6" brick concrete, cement block, tile, or cinder blocks. Hollow masonry units must be filled according to 27 CFR 555.207(a)(1)
- Metal wall -14 gauge steel or aluminum lined with:
  - Brick or concrete blocks
  - 4" hardwood
  - 6" sand between inner and outer walls

Alternate construction meeting bullet-resistant criteria  
provided in ATF Ruling 76-18



# Type 2 Magazine Construction

An indoor or outdoor portable or mobile magazine for the storage of high explosives



- **Bullet-resistant**
- **Fire-resistant**
- **Weather-resistant**
- **Theft-resistant**
- **Ventilated**

**Examples: a box, trailer, semi-trailer, etc.**



# Type 2 Magazine Construction

## Outdoor magazines



- Exterior and Doors: Not less than ¼ inch steel and lined with at least 2 inches of hardwood
- Magazines with top openings will have lids with water-resistant seals or which overlap the sides by at least 1 inch when closed.

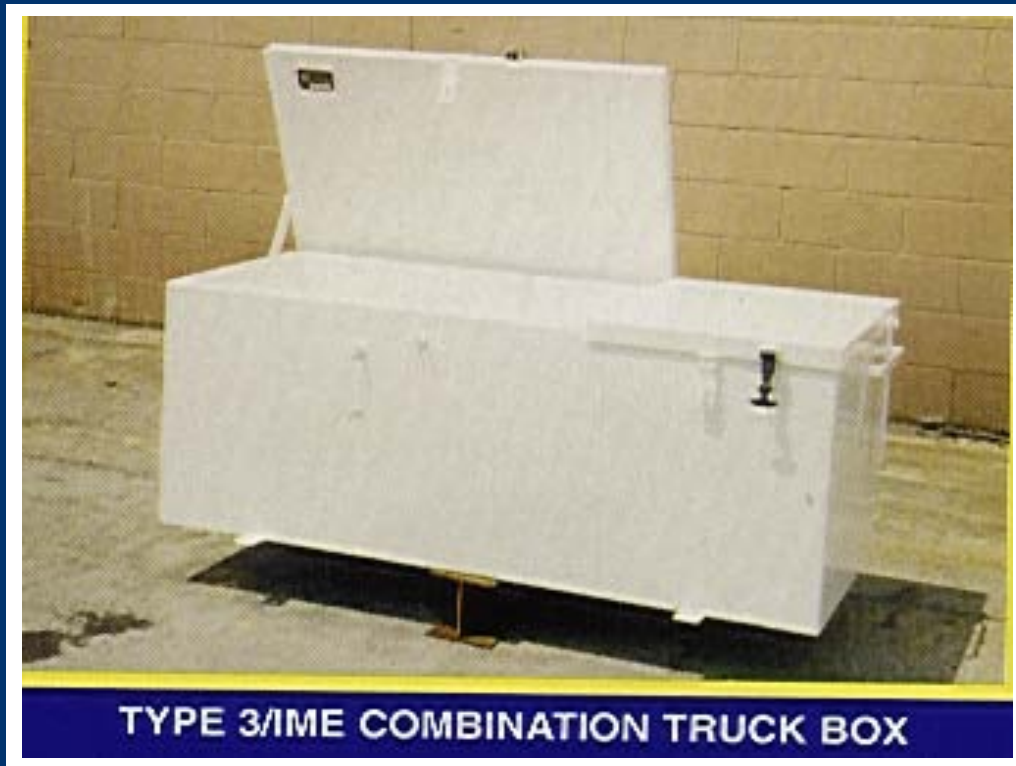


# Type 3 Magazine Construction

A portable “day box” magazine used for temporary attended storage (not overnight storage); must be locked when not putting explosives into, or removing from, the magazine

## Must be:

- ❖ Fire-resistant
- ❖ Weather-resistant
- ❖ Theft-resistant



TYPE 3/IME COMBINATION TRUCK BOX



# Type 3 Magazine Construction

- 12 gauge steel lined with 1/2" plywood or Masonite-type board
- Doors must overlap by 1"
- Locking: One five tumbler padlock with 3/8" shackle, no hood required



# Type 4 Magazine Construction

A permanent structure or a portable/mobile facility for the storage of low explosives. May be indoor or outdoor.



## Must be:

- ❖ Fire-resistant
- ❖ Weather-resistant
- ❖ Theft-resistant



# Type 4 Magazine Construction

- Walls must be constructed of masonry, metal covered wood, fabricated metal or a combination thereof
- Doors must be metal or solid wood covered with metal
- KINGPIN locking device is an acceptable means of securing a vehicular type 4 magazine





# Type 5 Magazine Construction

A permanent structure or other mobile facility for the storage of blasting agents. May be indoor or outdoor.



## Must be:

- ❖ Weather-resistant
- ❖ Theft-resistant



# Type 5 Magazine Construction



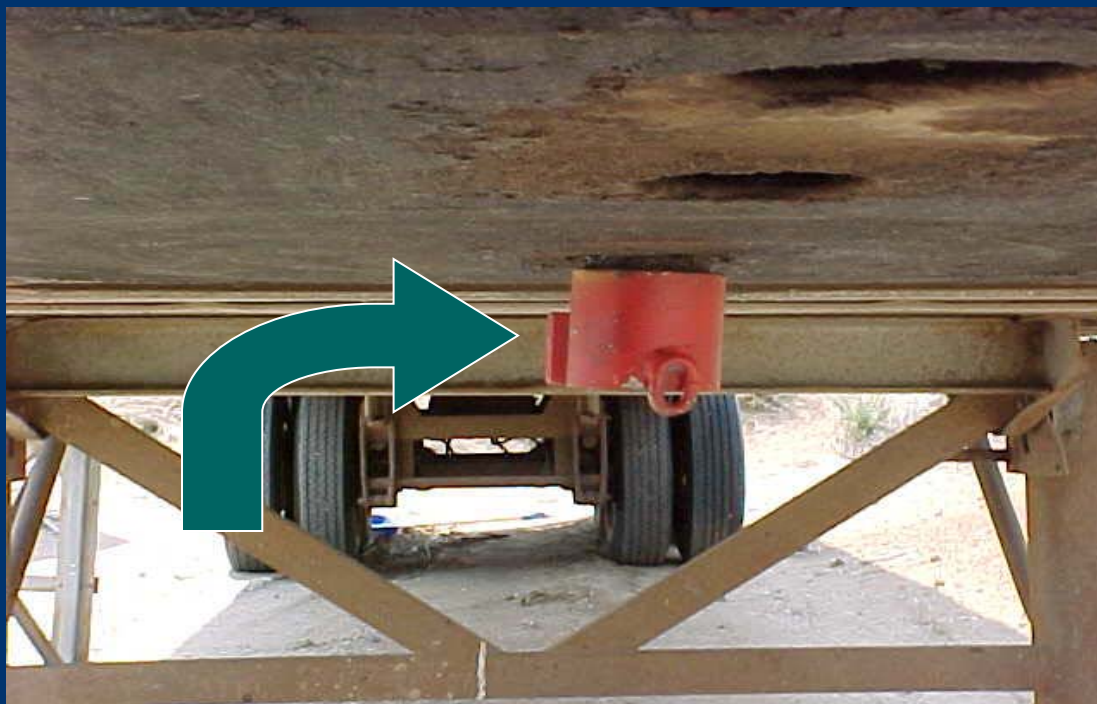
- Vehicular magazines-locking requirements:  
One five tumbler padlock with 3/8" shackle, no hood required
- Doors must be constructed of solid wood or metal

Placards required for type 5 magazines



# Securing Type 5 Trailers

When unattended, vehicular magazines must have wheels removed or otherwise be effectively immobilized by kingpin locking devices or other methods approved by ATF



Kingpin locking device immobilizes drop trailer



# Construction Requirements Common to all Types of Storage

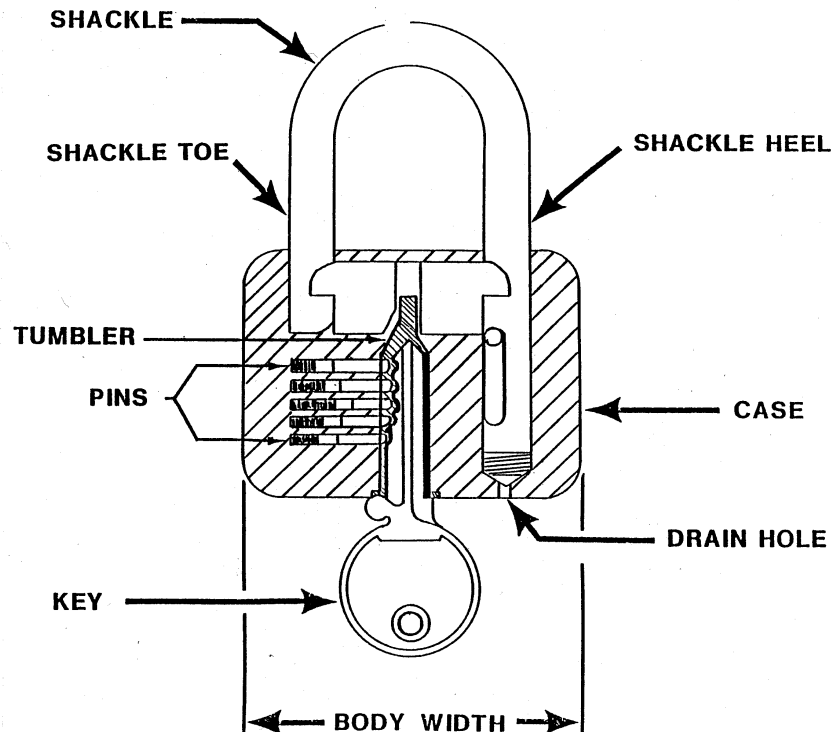
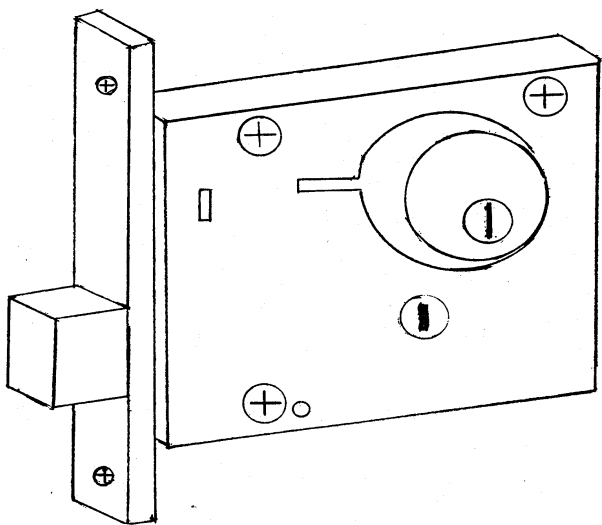
Hinges and hasps  
must be attached to  
doors by welding,  
riveting, or bolting  
so that the bolts  
cannot be removed  
from the outside





# Required Locks

## MORTISE LOCK



Padlocks must have five tumblers and 3/8-in case-hardened shackles fastened in separate hasps and staples



# Hoods

Padlocks must be protected with no less than ¼ inch steel hoods constructed so as to prevent sawing or lever actions on the locks, hasps and staples.





# Housekeeping Requirements

- The interior must be clean, dry and free of grit, paper, empty packages and containers
- Floors must be regularly swept
- No spark-producing metal in magazines
- The exterior must be clear of rubbish, brush, dry grass or small trees within 25 feet of the magazine
- Live foliage which is used to stabilize the earthen covering of a magazine need not be removed
- All volatile materials must be kept no less than 50 feet from the magazine



# Tables of Distances

§ 55.218 Table of distances for storage of explosive materials.

Quantity of Explosives		Distances in feet							
Pounds over	Pounds not over	Inhabited buildings		Public highways with traffic volume 2000 or less vehicles/day		Passenger railways—public highways with traffic volume of more than 3,000 vehicles/day		Separation of magazines	
		Barricaded	Unbarricaded	Barricaded	Unbarricaded	Barricaded	Unbarricaded	Barricaded	Unbarricaded
5	10	90	180	35	70	64	128	8	16
10	20	110	220	45	90	81	162	10	20
20	30	125	250	50	100	93	186	11	22
30	40	140	280	55	110	103	206	12	24
40	50	150	300	60	120	110	220	14	28
50	75	170	340	70	140	127	254	15	30
75	100	190	380	75	150	139	278	16	32
100	125	205	410	80	160	150	300	18	36
125	150	215	430	85	170	159	318	19	38
150	200	225	450	90	180	173	350	21	42
200	250	255	510	105	210	189	378	23	46
250	300	270	540	110	220	201	402	24	48
300	400	295	590	120	240	221	442	27	54
400	500	320	640	130	260	238	476	29	58
500	600	340	680	135	270	253	506	31	62
600	700	355	710	145	290	269	532	32	64
700	800	375	750	155	310	278	556	33	66
800	900	390	780	155	310	289	579	35	70
900	1,000	400	800	160	320	300	600	36	72
1,000	1,200	425	850	165	330	318	636	39	78
1,200	1,400	450	900	170	340	336	672	41	82
1,400	1,600	470	940	175	350	351	702	43	86
1,600	1,800	490	980	180	360	366	732	44	88
1,800	2,000	505	1,010	185	370	378	756	45	90
2,000	2,500	545	1,090	190	380	408	816	49	98
2,500	3,000	580	1,160	195	390	432	864	52	104
3,000	4,000	635	1,270	210	420	474	948	58	116
4,000	5,000	685	1,370	225	450	513	1,026	61	122
5,000	6,000	720	1,440	235	470	546	1,092	65	130
6,000	7,000	770	1,540	245	490	573	1,146	68	136
7,000	8,000	800	1,600	250	500	600	1,200	72	144
8,000	9,000	835	1,670	255	510	624	1,248	75	150
9,000	10,000	865	1,730	260	520	645	1,290	78	156
10,000	12,000	875	1,750	270	540	687	1,374	82	164
12,000	14,000	885	1,770	275	550	723	1,446	87	174
14,000	16,000	900	1,800	280	560	756	1,512	90	180
16,000	18,000	940	1,880	290	570	798	1,572	94	188
18,000	20,000	975	1,950	295	580	831	1,626	98	196
20,000	25,000	1,005	2,000	315	630	874	1,752	105	210
25,000	30,000	1,130	2,260	340	680	933	1,866	112	224
30,000	35,000	1,205	2,400	360	720	981	1,962	119	238
35,000	40,000	1,275	2,500	380	760	1,029	2,058	124	248
40,000	45,000	1,340	2,600	400	800	1,068	2,130	129	258
45,000	50,000	1,400	2,700	420	840	1,104	2,200	135	270
50,000	55,000	1,460	2,800	440	880	1,140	2,268	140	280
55,000	60,000	1,515	2,900	455	910	1,173	2,330	145	290
60,000	65,000	1,560	2,950	470	940	1,206	2,390	150	300
65,000	70,000	1,610	3,000	485	970	1,236	2,450	155	310
70,000	75,000	1,655	3,050	500	1,000	1,263	2,500	160	320
75,000	80,000	1,698	3,090	510	1,020	1,293	2,550	165	330
80,000	85,000	1,740	3,130	520	1,040	1,317	2,600	169	340
85,000	90,000	1,780	3,170	530	1,060	1,344	2,650	175	350
90,000	95,000	1,790	3,200	540	1,080	1,368	2,690	180	360
95,000	100,000	1,815	3,230	545	1,090	1,382	2,710	185	370
100,000	105,000	1,830	3,250	550	1,100	1,437	2,800	195	390
110,000	120,000	1,835	3,260	555	1,110	1,479	2,860	205	410
120,000	130,000	1,875	3,290	560	1,120	1,521	2,910	215	430
130,000	140,000	1,890	3,300	565	1,130	1,557	2,960	225	450
140,000	150,000	1,900	3,310	570	1,140	1,593	2,990	235	470
150,000	160,000	1,915	3,320	580	1,150	1,629	3,030	245	490
160,000	170,000	1,935	3,330	585	1,160	1,662	3,070	255	510
170,000	180,000	1,990	3,360	600	1,200	1,695	3,100	265	530
180,000	190,000	2,010	3,370	605	1,210	1,725	3,140	275	550
190,000	200,000	2,030	3,380	610	1,220	1,755	3,180	285	570
200,000	210,000	2,050	3,390	620	1,240	1,782	3,200	295	590
210,000	220,000	2,100	3,400	635	1,270	1,836	3,260	315	630
220,000	230,000	2,150	3,410	650	1,300	1,888	3,300	325	650
250,000	275,000	2,215	3,410	670	1,340	1,950	3,360	360	720
275,000	300,000	2,275	3,410	690	1,380	2,008	3,400	385	770

- Apply to the outdoor storage of explosive materials
- Determine the required minimum separation distances from explosive storage magazines to inhabited buildings, public highways, passenger railways, and other magazines



# Violations and Corrective Actions

## IOI's will:

- Document all violations of recordkeeping and storage requirements disclosed during the inspection on ATF Form 5030.5, Report of Violations
- Prescribe corrective action and time frame for such action
- Follow up to ensure that all violations are corrected and licensee or permittee has come into compliance with requirements



# Facilitating Successful and Efficient ATF Inspections

## During Inspection:

- Ensure records are available for examination
- Expect that inventory and records examinations will be time-consuming and thorough
- Ensure that a knowledgeable (responsible) person is available to answer questions and provide assistance, if necessary
- If you have any questions on what to expect, be sure to ask so you can prepare any necessary contingencies.



# Shock Tube Storage

- Final Rule published January 20, 2010
  - ❖ Amends 27 CFR 555.213(b)
  - ❖ Shock tube may be stored in a type 4 magazine (along with other non-mass-detonating detonators, safety fuse, and other specified items)
  - ❖ Also permitted to be stored with such items in a type 1 or type 2
- Effective March 22, 2010

## DEPARTMENT OF JUSTICE

Bureau of Alcohol, Tobacco, Firearms,  
and Explosives

27 CFR Part 555

[Docket No. ATF 15F; AG Order No. 3133-  
2010]

RIN 1140-AA30

Commerce in Explosives—Storage  
of Shock Tube With Detonators  
(2005R-3P)

**AGENCY:** Bureau of Alcohol, Tobacco,  
Firearms, and Explosives (ATF),  
Department of Justice.

**ACTION:** Final rule.

**SUMMARY:** The Department of Justice is amending the regulations of the Bureau of Alcohol, Tobacco, Firearms, and Explosives (ATF) by allowing shock tube to be stored with detonators because these materials when stored together do not pose a mass detonation hazard. Shock tube is a small diameter plastic laminate tube coated with a very thin layer of explosive material. When initiated, it transmits a low energy wave from one point to another. The outer surface of the tube remains intact during and after functioning.

**DATES:** This rule is effective March 22,  
2010.

**FOR FURTHER INFORMATION CONTACT:**  
James P. Ficaretta, Enforcement  
Programs and Services, Bureau of  
Alcohol, Tobacco, Firearms, and  
Explosives, U.S. Department of Justice,  
99 New York Avenue, NE., Washington,  
DC 20226; telephone: (202) 648-7094.



# Ruling on Explosives Label Visibility

- 555.214(b)-Explosives must be stored so marks are visible
- Clarifies how this section applies to specific scenarios
  - ❖ Pallets of material
  - ❖ Rows stacked together
- Approved June, 2010





# Perforating Gun Ruling

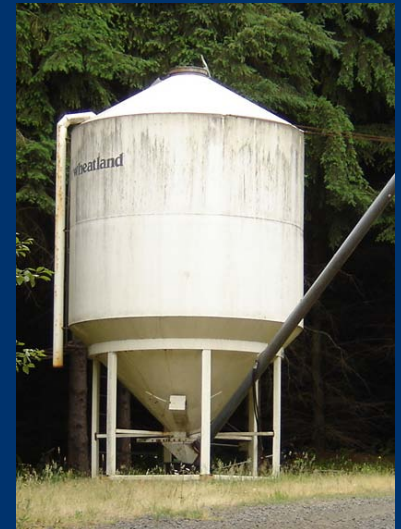
- Perforating guns use shape charges to fracture or liberate oil and gas wells
  - ❖ Charges mounted inside metal carrier or on a bar/rod/wire. Connected with detonating cord.
- Ruling allows for “loaded” guns to be stored outside of magazines under specified conditions (e.g., detonator interrupter device, security provisions, certain weight limits)
  - ❖ Similar to previously issued variances
- Approved November 2010





# Type 5 Bin Locking Ruling

- Type 5 bins typically do not meet hooded locking requirements
- Allows for one unhooded 3/8-inch, case-hardened padlock
- Additional security measures required
  - ❖ Locked gate, security guards, fences
- Ruling does not apply to type 4 magazines
- Approved February 2011





# Locks Ruling

- Approves use of additional locks under certain conditions
  - ❖ Puck locks, recessed locks, and padlocks with boron-alloy shackles
- Approved June, 2011





# Magazine Floors – Pending Ruling

- Wooden floors on exterior of magazines
- Currently requires a variance
- Must be placed on gravel pad or skirted.
- Not yet approved





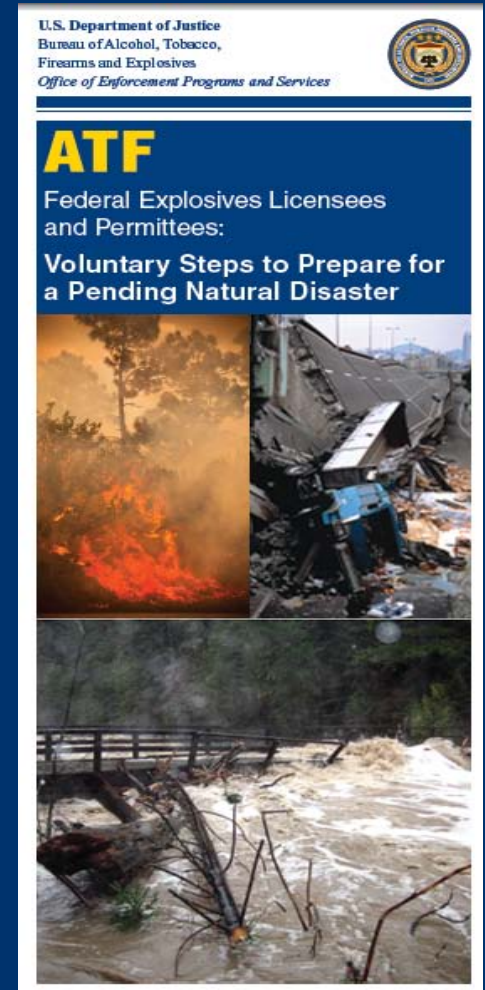
# Pamphlets

- **Disaster Preparedness**

<http://www.atf.gov/publications/download/p/atf-p-5400-16.pdf>

- **In the works:**

- ❖ Recordkeeping
- ❖ Storage
- ❖ Self-Audit

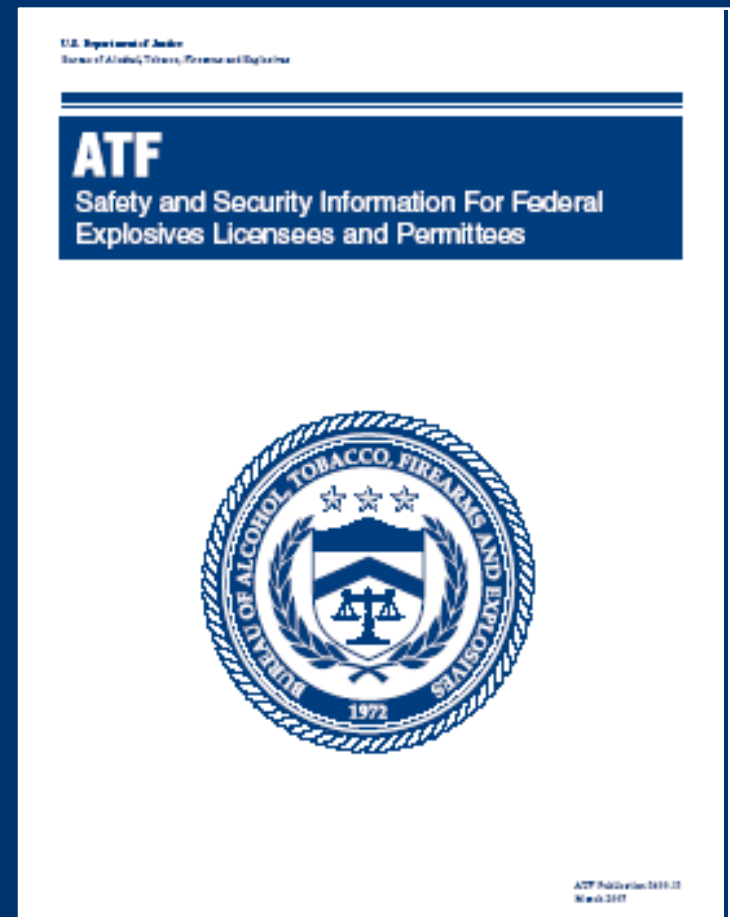




# Safety and Security Booklet

ATF P 5400.15 - March 2008

- Developed with ISEE and IME
- Tips, techniques, and tools for better security
- ATF Contact information
- Sample explosives records





# Theft or Loss

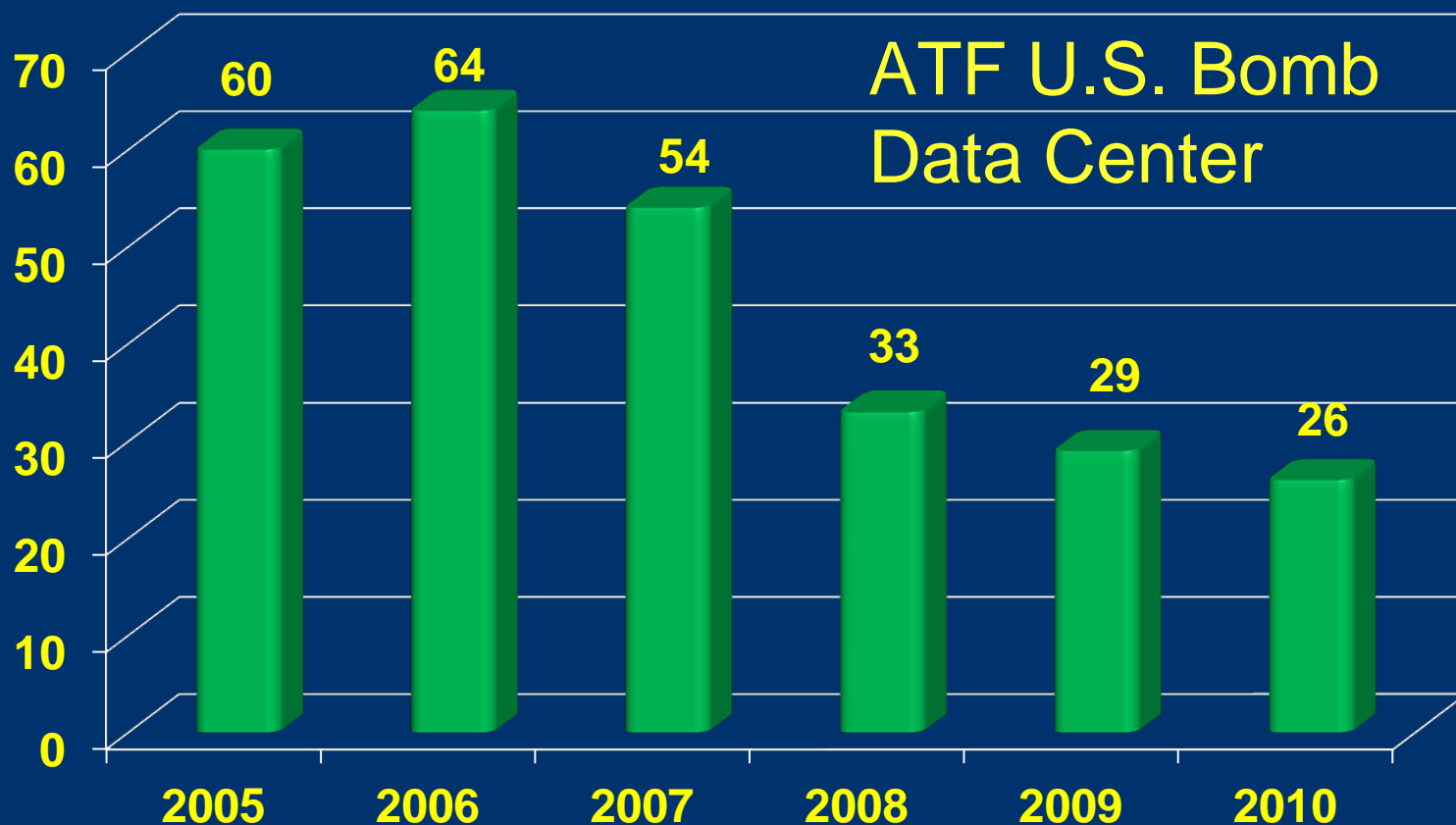
- Contact ATF explosives theft hotline: 1-800-461-8841 or ATF 24-hour hotline: 1-800-800-3855
- Must report **theft or loss** within 24 hours of discovery
- Complete and submit ATF Form 5400.5
- Contact local authorities
- Penalties for failure to report theft include \$10,000 fine and up to 5 years in prison

Contact the [U.S. Bomb Data Center](#) at 1-800-461-8841 or at [USBDC@atf.govstaff](mailto:USBDC@atf.govstaff) for assistance with any questions regarding the reporting of theft or loss of explosive materials.



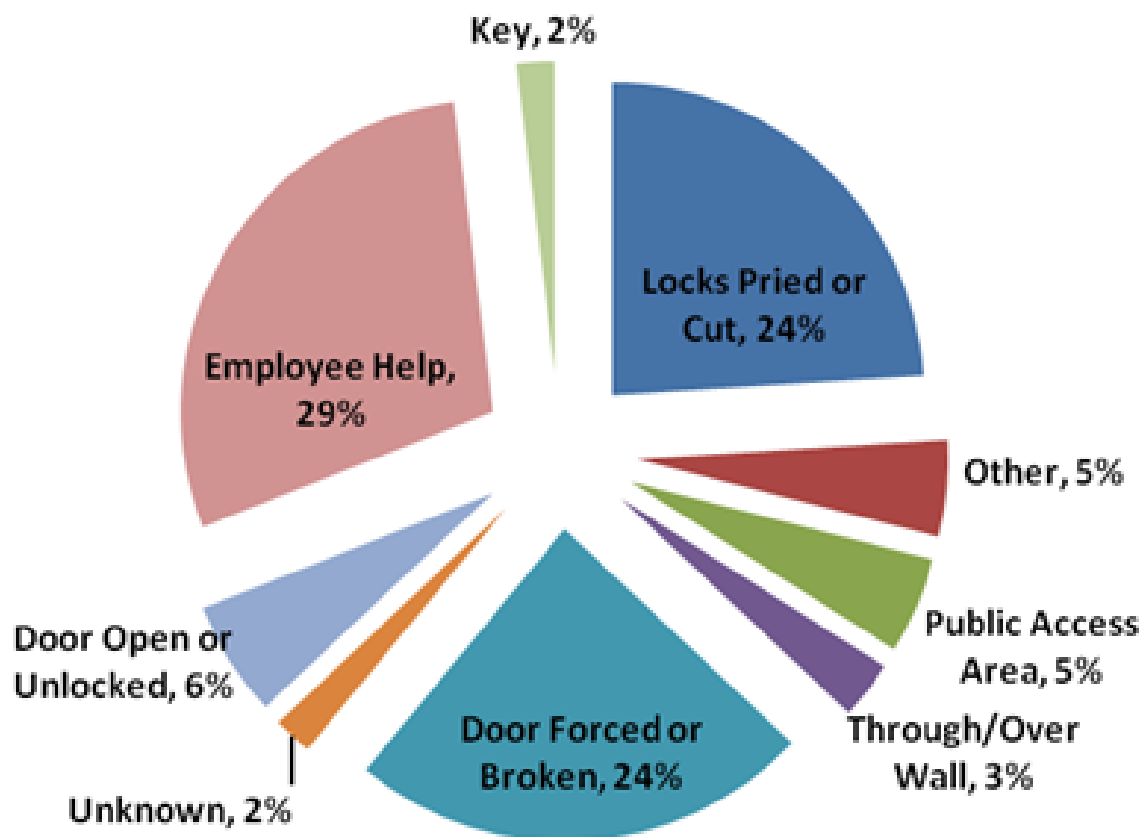
# Thefts of Explosives

2005 thru 2010





# Thefts of Explosives





# VIOLATIONS

MOST FREQUENTLY CITED EXPLOSIVES VIOLATIONS		YEAR					
		FY 2010		FY 2009		FY 2008	
Citation	Violation Description	No.	RANKING	No.	RANKING	No.	RANKING
27 CFR 555.127	Daily Summary of Magazine Transactions	365	1	517	1	384	1
27 CFR 555.125	House Keeping Guidelines	125	2	135	2	107	3
27 CFR 555.215	Records Maintained by Permittees	86	3	124	3	114	2



# Suggestions

- Establish a contact within the local ATF office
  - ❖ Call ATF before you have a problem
  - ❖ Invite ATF to conduct training
- Frequent inventory verifications
- Educate your employees about the regulations and rulings
- Organize records in separate files
- Review security at premises
  - ❖ Consider upgrading padlocks



# Website Update Notices

[www.atf.gov](http://www.atf.gov)

- Updated website – we are looking for feedback
- Subscribe to receive email notices when new explosives information is posted to the ATF site

## **ATF Explosives Industry Newsletter**

Receive FEL Newsletter Updates 

## **Explosives Industry News**

Receive Explosives Industry News Updates 

## **ATF Open Letters and Important Interpretation Letters**

Receive Open Letter Updates 



# Reminder...

You are required to:

- Conduct yearly physical inventory of all explosives on-hand (\*record must be on file for inspection)
- Report all thefts and losses to ATF within 24 hours of discovery, by telephone [1-800-800-3855](tel:1-800-800-3855), and in writing by completing ATF F5400.5
- Visually inspect locks and magazines at least every seven days
- Notify the authority having jurisdiction for fire safety in the locality in which explosives are stored



# Industry Resources

- [WWW.ATF.GOV](http://www.atf.gov)
- Local ATF field offices:  
<http://www.atf.gov/field/>
- Explosives Industry Programs Branch (EIPB)
  - EIPB e-mail address: [EIPB@atf.gov](mailto:EIPB@atf.gov)
  - EIPB phone number: (202) 648-7120