

UNITED STATES BOMB DATA CENTER (USBDC) EXPLOSIVES INCIDENT REPORT (EIR)

2017

The Annual Explosives Incident Report (EIR) reviews bombing and explosives related incidents from information reported to the United States Bomb Data Center (USBDC) through the Bomb Arson Tracking System (BATS).

UNCLASSIFIED

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EXECUTIVE SUMMARY

OPERATING HIGHLIGHTS

The 2017 Explosives Incident Report (EIR) is an informational product prepared by the United States Bomb Data Center (USBDC), using incident data reported in the Bomb Arson Tracking System (BATS) by its 2,600 interagency partners and 12,845 registered users. This report examines the total number of explosives related incidents reported in BATS for calendar year 2017 and includes explosions and bombings, recoveries, suspicious packages, bomb threats, hoaxes, and explosives thefts/losses. It is important to note that BATS is a real-time dynamic incident management system that is strictly user dependent; therefore, it is possible that the data represented in this report may differ slightly from previously reported data due to updates or changes made by the owner of individual records.

STRATEGIC HIGHLIGHTS

From January 1, 2017, through December 31, 2017, BATS captured a total of **14,814** *explosives related incidents*. Of the reported incidents, there were **687** explosions of which **335** were *bombings*, with California and Washington having the highest numbers. There were a total of 6,727 recoveries reported in 2017, with the majority being explosives (non-improvised explosive devices (IEDs)). There were a total of 5,552 suspicious/unattended package incidents, a decrease of 8 percent since 2016. Bomb threats continue to decrease slightly as they have for the past 5 years. There were 1,670 bomb threats reported in 2015, 1,536 in 2016, and 1,228 in 2017. Education and office/business properties remain the most commonly reported targets of bomb threats. Bomb threats to assembly locations increased by 30 percent since 2016.

LOOKING AHEAD

Throughout 2017, the USBDC continues to build on previous efforts of expanding operational support to all of our interagency partners and members of the BATS user community. The BATS Section (BATSS) has maintained its focus on the BATS program and related system enhancements, while the Arson and Explosives Information and Analysis Section (AEIAS) has focused on arson and explosives analytical products as well as explosives identification, tracing and theft/loss reporting. AEIAS is also responsible for developing and producing intelligence products such as this annual report as well as a variety of other standardized, automated and on-demand reports that serve to inform the BATS user community and increase regional and national situational awareness concerning explosives and arson related incidents. This realignment within the USBDC, along with enhancements of BATS 8.1 and mobile BATS (mBATS2.1), will continue to establish the USBDC as a center of excellence for arson and explosives related reporting within the United States.

James Watson Director, USBDC

EXPLOSIONS - 2017

1.1 Explosion Incidents, Summary and Trends

Explosion Incidents are identified by the following categories: *bombings*, *accidental*, *undetermined* and *under investigation explosions*. The *undetermined explosion* category is used when the investigation has concluded, but the explosion type was unidentified. The *under investigation* category is used when the cause of the explosion is still pending or awaiting laboratory results.

Explosion Incidents include all incidents where explosive materials, chemicals, or ignitable mixtures were determined to be the primary cause of an explosion.

There were 687 Explosion Incidents recorded in BATS during 2017, a slight decrease of 2 percent from 2016. Bombings also decreased, from 439 reported incidents in 2016 to 335 incidents in 2017.

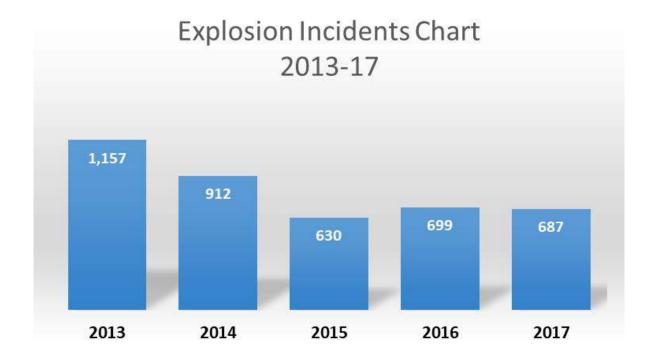


Figure 1. Explosion Incidents, 2013-17

EXPLOSIONS - 2017

1.2 Explosion Incidents with Reported <u>Injuries</u>



	I	njure	d		
Year	2013	2014	2015	2016	2017
Fire Service	5	1	0	3	0
Law Enforcement	6	18	1	1	2
Suspects	20	17	5	5	7
Victims	98	437	58	59	58
Total	129	473	64	68	67

Figure 2. Explosion Incidents - Injuries

Note: There were two major explosions that accounted for the high number of injuries in 2014. One was caused by an accidental explosion at a detention facility (174 injuries), and the other was caused by an accidental explosion at a 5-story building with multifamily residences. This explosion caused 60 injuries.

Victim injuries account for 87 percent of the total number of reported injuries in 2017 and were primarily caused by accidental explosions.

1.3 Explosion Incidents with Reported <u>Fatalities</u>



		Killed	1		
Year	2013	2014	2015	2016	2017
Fire Service	1	0	0	0	0
Law Enforcement	2	0	0	0	0
Suspects	22	3	0	2	1
Victims	56	38	8	7	16
Total	81	41	8	9	17

Figure 3. Explosion Incidents - Fatalities

EXPLOSIONS - 2017

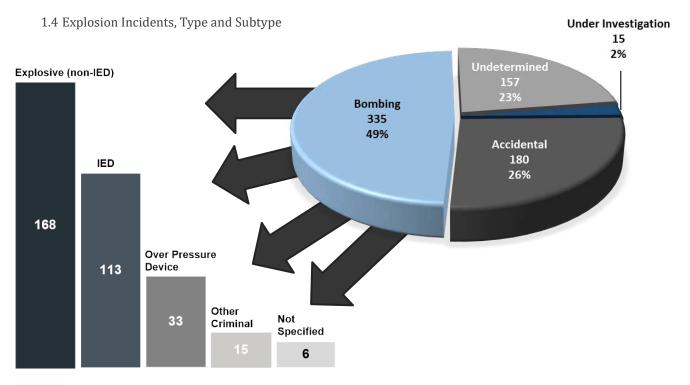


Figure 4. Explosion Incidents, Type and Subtype

1.5 Bombing Trends

A total of 335 bombing incidents were reported in 2017, a decrease of 24 percent from 2016.

Bombings are broken down into the following categories: IED, Over Pressure Devices, Other Criminal, and Explosive (non-IED such as commercial, military, fireworks, and HME). Ninety-nine (99) of the 335 bombings targeted Residential structures. As in 2016, there were two (2) reported church bombings in 2017. School bombings decreased from 22 incidents in 2016 to 11 incidents in 2017.

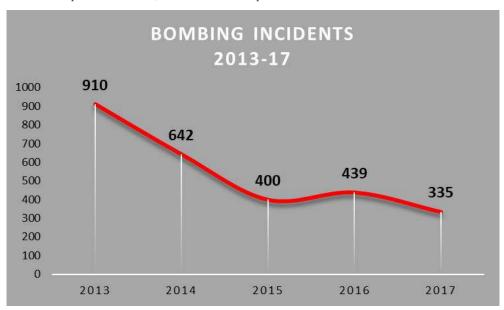


Figure 5. Bombing Incidents

EXPLOSIONS - 2017

The figure below represents all the States that had 10 or more reported bombings in 2017. As a comparison, 2015 and 2016 are included as well. There was a significant decrease in California since 2016 but close to what was reported in 2015.

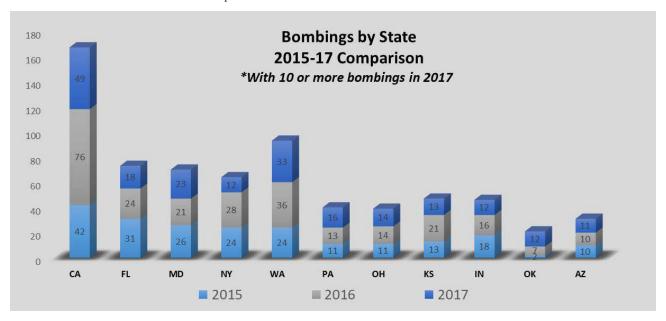


Figure 6. Comparison of Bombings by State

1.6 Explosions Device - Main Charges

Pyrotechnics/Fireworks, Flash Powder/Pyrotechnic Mixture, and Black Powder remain the most common device main charges reported in explosion incidents for 2017.

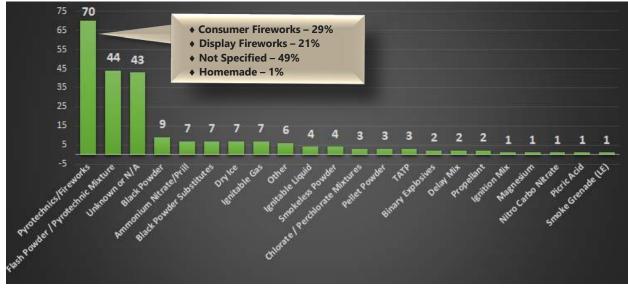


Figure 7. Explosions Device - Main Charges, 2017

EXPLOSIONS - 2017

1.7 Explosions, All Devices and Materials – Main Charges

Explosion Main Charges						
Material Subtype Description	2013	2014	2015	2016	2017	Total
Ammonium Nitrate/Prills	6	5	10	4	6	31
ANFO (Blasting Agent)	1	0	0	0	0	1
Binary Explosives	15	11	9	9	2	46
Black Powder	28	20	18	21	9	96
Black Powder Substitutes	11	7	5	10	7	40
Blasting Agent	0	1	0	0	0	1
Booster	1	1	0	0	0	2
Chlorate / Perchlorate Mixtures	7	2	2	6	3	20
CS/OC Grendade (LE)	0	0	0	1	0	1
Delay Mix	5	0	0	0	2	7
Dry Ice	20	22	10	6	7	65
Dynamite	0	1	0	0	0	1
Emulsion (Blasting Agent)	1	1	0	0	0	2
Flash Powder / Pyrotechnic Mixture	81	63	44	46	44	278
Flashbang/Distraction (LE)	1	0	0	0	0	1
HMTD	1	2	0	1	0	4
Hydrogen Peroxide Mixtures	0	2	0	1	0	3
Ignitable Gas	8	9	10	8	7	42
Ignitable Liquid	11	6	3	7	4	31
Ignitable Solid	1	1	0	0	0	2
Ignition Mix	2	1	0	0	1	4
Liquid Explosive	1	0	0	0	0	1
Magnesium	1	0	0	1	1	3
Match Heads	0	1	0	3	0	4
MEKP	0	0	0	1	0	1
Nitro Carbo Nitrate	0	0	0	1	1	2
Ordnance	0	0	1	0	0	1
Other (Not identified)	36	11	11	6	7	71
Pellet Powder	1	1	0	0	3	5
PETN	0	1	2	0	0	3
Picric Acid	0	0	0	0	1	1
Primer	0	0	2	1	0	3
Propellant	1	2	1	2	2	8
Pyrotechnics/Fireworks	133	134	115	126	70	578
RDX	1	1	0	0	0	2
Seal Bomb	1	0	0	0	0	1
Signaling Device	0	1	0	1	0	2
Smoke Grenade (LE)	0	0		0	1	1
Smokeless Powder	21	10	11	20	4	66
TATP	0	2	1	4	3	10
Unknown or N/A	0	0	0	0	43	43

Note: The items in yellow highlight the top three Explosion Main Charges for 2017.

Figure 8 displays an overall view of main charges related to **Explosion** Incidents for the past 5 years. These numbers do not represent the actual quantity of main charges but rather represent the number of reported incidents where at least one or more main charges were identified.

Unknown or N/A
(located at the
bottom of the
chart) indicates
there was no main
charge identified
or the main
charge was
unknown at the
time of the record
entry.

Figure 8. Explosion - Main Charges, 2013-17

EXPLOSIONS - 2017

1.8 Explosion - Device Containers

The data represented in figure 9 illustrates the number of *explosives incidents* for each container type and does not represent the actual quantity of identified containers. For example, if there were multiple pipe bombs with end caps discovered in the same incident, the numbers below would represent one pipe and one end cap associated with that incident. However, if there were two identical container types recovered in the same incident but both consisted of independent material subtypes, then both are counted.

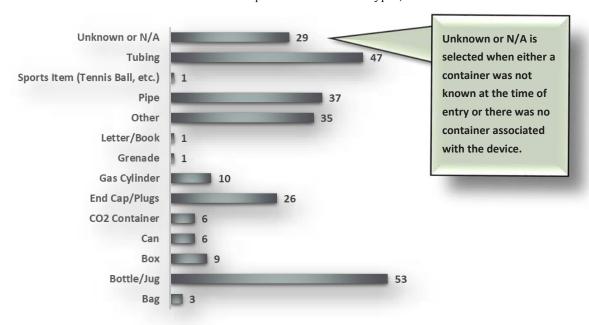


Figure 9. Explosion Device Containers - 2017

1.9 Explosion - Switches

Figure 10 shows the total number of switches reported during an explosion incident for calendar year (CY) 2017. Pyrotechnic (Safe/Time Fuse / Hobby Fuse) switches were among the highest reported. Note: Unknown or N/A is selected when either a switch was not known at the time of entry or there was no switch associated with the device.

Switch Type					
Command Pull	1				
Command Wire IED	1				
Electronic (Clock, Timer, Watch, etc)	1				
Pyrotechnic (Safe/Time Fuse, Hobby Fuse)	5				
Radio Controlled IED	2				
Victim Operated	3				
Unknown or N/A	70				
Grand Total	83				

Figure 10. Switches Related to Explosions - 2017

RECOVERIES 2013-17

RECOVERIES – 2017

2.1 Recovery Incidents, Summary and Trends

2013

2014

6,943 7000 6,876 6,879 6,727 6,727 6,727 6,727

Figure 11. Recovery Incidents, 2013-17

2016

2017

2015

2.2 Recovery Types

Overall, the largest recovery type and subtype categories remain unchanged. Explosives (non-IED) recoveries represent the majority, with commercial explosives recoveries and pyrotechnic recoveries in the lead. The "Other" category includes the following subtypes: Ammunition, Bomb Making Information, Inert Commercial, and Inert–Military. Of those subtypes, Ammunition (963) and Inert–Military (825) were the most reported. (See figures 12 and 13.)

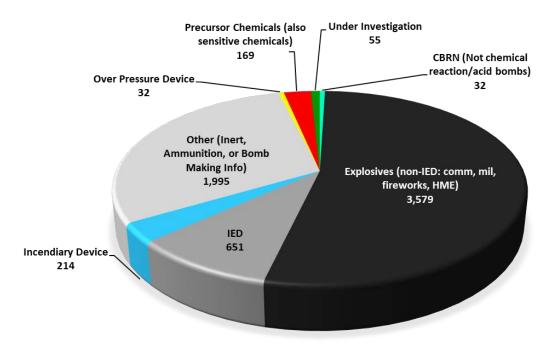


Figure 12. Recovery Types - 2017

RECOVERIES – 2017

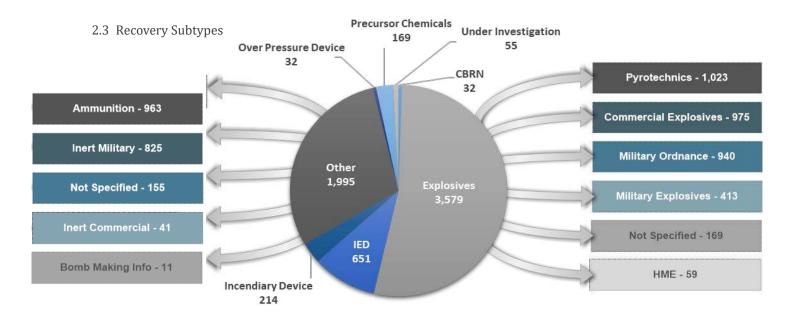


Figure 13. Recovery Subtypes

2.4 Recovery Incidents by Target Type

Of the recovery incidents where a target was reported in 2017, the majority took place at residential structures (29 percent) and law enforcement/emergency offices (10 percent). The majority of recovery incidents at law enforcement/emergency offices does not indicate that a specific device was recovered after being placed at the location; rather, it is most likely due to explosives material turn-ins, etc. See figure 14 for a complete list of all recoveries by location.

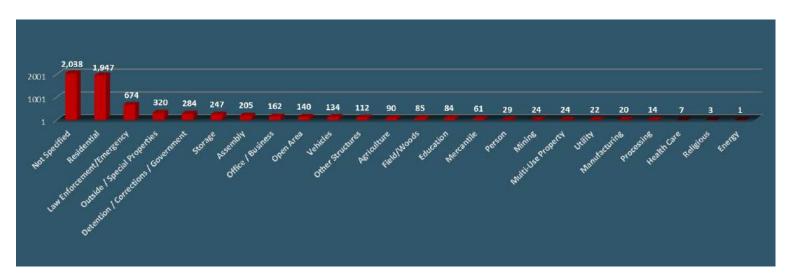


Figure 14. Recovery Incidents by Target Type

RECOVERIES – 2017

2.5 Recovery - All Devices and Materials - Main Charges

Recovery Main Charges							
Material Type	2013	2014	2015	2016	2017	Grand Total	
Ammonium Nitrate/Prill	21	19	21	24	18	103	
ANFO (Blasting Agent)	13	16	17	9	14	69	
Binary Explosives	31	47	46	49	41	214	
Black Powder	200	220	182	210	150	962	
Black Powder Substitutes	72	74	77	79	84	386	
Booster	25	39	22	30	25	141	
Chlorate / Perchlorate Mixtures	17	12	18	15	7	69	
Composition B	3	7	7	8	4	29	
Composition C4	23	34	31	30	12	130	
CS/OC Grenade (LE)	3	21	17	12	6	59	
Dry Ice	4	6	5	2	1	18	
Dynamite	157	154	128	101	91	631	
Emulsion (Blasting Agent)	23	41	28	19	30	141	
Flash Powder / Pyrotechnic Mixture	363	303	285	291	239	1,481	
Flashbang/Distraction (LE)	1	6	7	5	7	26	
HMTD	4	2	4	6	6	22	
Ignitable Gas	9	1	7	5	9	31	
Ignitable Liquid	89	91	72	81	43	376	
Ignitable Solid	17	18	16	12	13	76	
Ignition Mix	3	2	1	1	5	12	
Match Heads	11	5	4	12	3	35	
Nitroglycerene	6	6	8	4	2	26	
Ordnance	2	6	13	2	19	42	
Other	67	51	60	71	62	311	
Pellet Powder	7	5	2	2	0	16	
Perforator	11	12	14	9	9	55	
Perforator Oil Well Gun Assembly	8	5	0	1	1	15	
PETN	13	7	3	6	6	35	
Picric Acid	21	16	12	13	8	70	
Primer	13	10	5	2	5	35	
Propellant	15	5	12	9	12	53	
Pyrotechnics/Fireworks	721	593	590	627	348	2,879	
RDX	2	6	8	7	2	25	
Seal Bomb	11	13	15	4	1	44	
Shape Charge	3	9	7	4	7	30	
Sheet Explosive	10	11	6	12	3	42	
Signaling Device	25	29	37	40	15	146	
Simulator	23	18	20	25	5	91	
Slurry (Blasting Agent)	21	17	12	8	3	61	
Smoke Grenade (LE)	2	8	13	16	13	52	
Smokeless Powder	205	184	163	200	140	892	
TATP	8	3	4	5	4	24	
TNT	17	31	16	22	15	101	
Unknown or N/A	0	0	0	0	314	314	
Water Gel (Blasting Agent)	5	2	0	2	5	14	

Figure 15. Recovery - Main Charges, 2013-17

Note: The items in yellow highlight the top five Recovery Main Charges for 2017.

Figure 15 displays an overall view of main charges related to recovery incidents for the past 5 years. These numbers do not represent the actual quantity of main charges but rather represent the number of reported incidents where at least one or more main charges were identified.

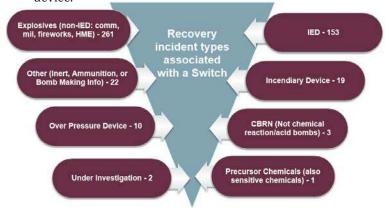
Unknown or N/A
(located at the
bottom of the
chart) indicates
there was no main
charge identified or
the main charge
was unknown at
the time of the
record entry.

Due to the large amount of data, if a main charge had a grand total of 10 or fewer recoveries, it was not included in the chart.

RECOVERIES – 2017

2.6 Recovery – Switches

The majority of recovered switch types in 2017 included Pyrotechnic (safety/time or hobby fuses) and command pull switches. See figure 16 for a breakdown of switch types with corresponding total number of incidents. Note: Unknown or N/A is selected when either a switch was not known at the time of entry or there was no switch associated with the device.



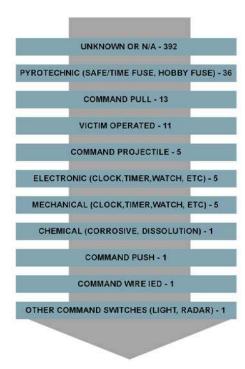
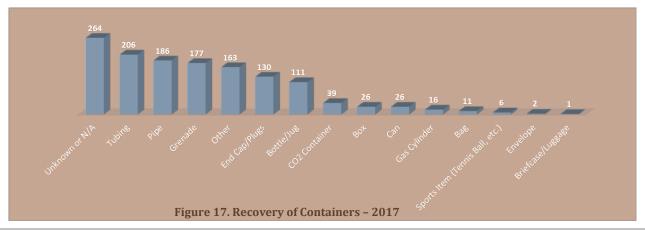


Figure 16. Recovered Switches - 2017

2.7 Recovery - Containers

Figure 17 provides the number of incidents where a container was reported as recovered in 2017. The statistics represented in this chart include a count of every time the specific container type was reported as recovered but does not represent the exact quantity of containers that were recovered. For instance, if one incident reported a recovery of two pipes, four end caps/plugs, and two bottles/jugs, it would be represented in the graph below as one incident. However, if there were two identical container types recovered in the same incident but both consisted of independent material subtypes, then both would be counted. Note: Unknown or N/A is selected when either a switch was not known at the time of entry or there was no switch associated with the device.



SUSPICIOUS PACKAGES – 2017

3.1 Suspicious Packages, Summary and Trends

There were 5,552 suspicious/unattended package incidents reported during the 2017 calendar year. This was an 8-percent decrease from 2016.

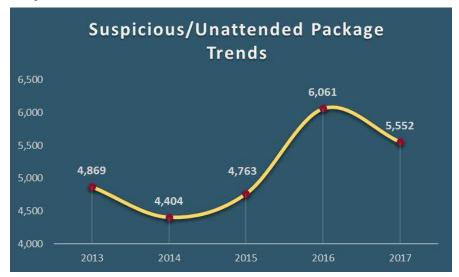


Figure 18. Suspicious/Unattended Packages

Incidents involving Luggage/Briefcases increased by 55 percent, and those involving Suspicious Containers increased from zero incidents in 2016 to 846 incidents in 2017. Book Bag/Purse incidents decreased by 89 percent. This notable shift in numbers is likely the result of an issue relating to an upgrade in BATS in April 2017. At that time, the Book Bag/Purse target subtype became unavailable for the remainder of the calendar year. However, the Suspicious Container subtype was available as a substitute, which resulted in a higher than usual number of records for that field. The above noted issue has since been resolved. See figure 19 for a comparison of suspicious package types between 2016 and 2017.

Туре	2016	2017	Difference
Book Bag / Purse	1,748	197	-1,551
Cargo (commercial)	110	106	J -4
Letter / Envelope	173	144	J -29
Luggage / Briefcase	1,166	1,813	1 647
Other	1,500	1,165	J -335
Package / Parcel	969	1,008	1 39
Person	21	33	1 2
Powder (Without Envelope)	19	45	1 26
Suspicious Container	0	840	1 840
Under Investigation	0	2	1 2
Vehicle	355	199	J -156

Figure 19. Suspicious/Unattended Package Incident Types

BOMB THREATS – 2017

4.1 Bomb Threats, Summary and Trends

A total of 1,228 bomb threat incidents were reported in 2017, a decrease of 20 percent since 2016 and an overall 28-percent decrease since 2013. In 2017, bomb threats were highest during the month of May with the majority of incidents occurring on Tuesdays.

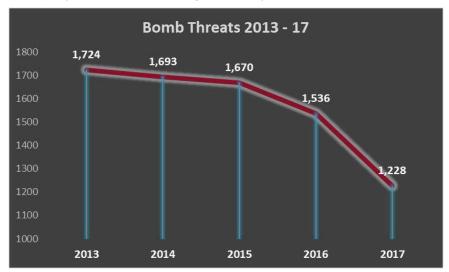


Figure 20. Bomb Threats - 5-year Trend Analysis

4.2 Bomb Threats by Target

Education, office/business, residential and assembly remain the top four targets of bomb threats in 2017. The number of reported incidents targeting assemblies **increased** by 30 percent since 2016. Restaurants and courthouses account for almost half of the bomb threats targeting assemblies in 2017.

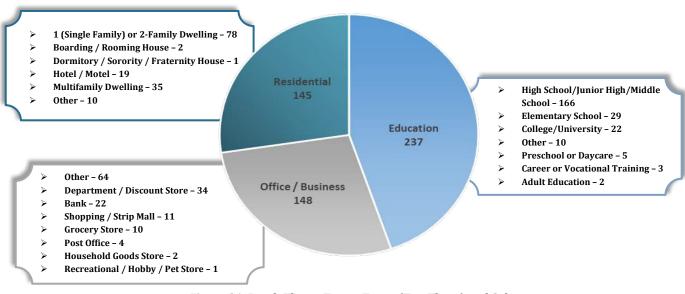


Figure 21. Bomb Threat Target Types (Top Three) and Subtypes

HOAXES - 2017

5.1 Hoax Device Incidents, Summary and Trends

There were 503 hoax device incidents reported in 2017. Ninety-three (93) percent of the reported hoax devices were IED-type hoax devices. California, Florida, Washington, and Colorado had the most reported hoax devices. Residential structures remain the most common target of reported hoax devices. Figure 22 shows that hoax device reporting is on a downward trend and is the lowest number seen since 2013.

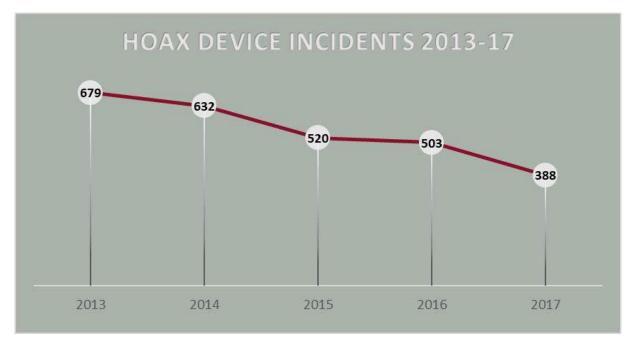


Figure 22. Hoax Device Incidents, 2013-17

5.2 Hoax Incidents by Incident Type

The most commonly reported hoax devices in 2017 were IEDs.

Type of reported hoax devices	2013	2014	2015	2016	2017
IED	627	579	474	468	361
CBRN (Not chemical reaction/acid bombs)	19	18	10	12	11
Incendiary Device	33	35	36	23	16
Total	679	632	520	503	388

Figure 23. Hoax Incident Types and Subtypes

THEFTS/LOSSES – 2017

6.1 Explosives Thefts, Summary and Trends

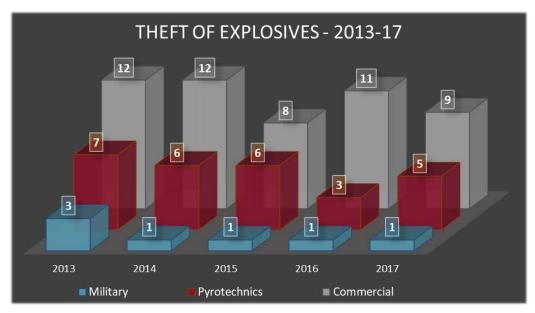


Figure 24. Explosives Theft Types, 2013-17

There were 15 reported thefts of explosives in 2017, which is unchanged from the previous 2 years. Commercial explosives remain the most commonly stolen, followed by pyrotechnics.

6.2 Explosives Theft Types per State

Figure 25 identifies states where explosives thefts were reported in 2017.

State	Commercial	Military	Pyrotechnics	Total
AR	2			2
CA	2			2
FL	1			1
GU			1	1
ID	1			1
IN	2			2
MO			2	2
MT			1	1
TX			1	1
VA	1			1
WV		1		1
Grand Total	9	1	5	15

Figure 25. Explosives Theft Types per State

THEFTS/LOSSES – 2017

6.3 Explosives Losses, Summary and Trends

There were 136 instances of explosives losses reported during 2017, an increase of 46 percent from 2016 and the highest number for the past 5 years. The majority of explosives losses were commercial explosives (77 percent) and pyrotechnics (21 percent).

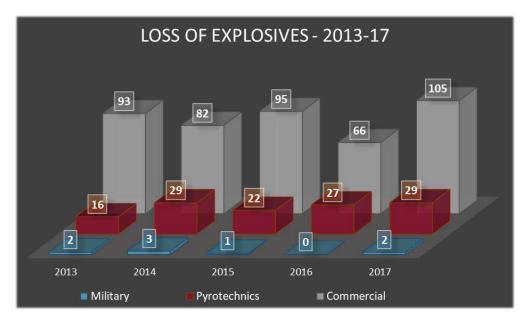


Figure 26. Explosives Loss Types, 2013-17

State	Commercial	Military	Pyrotechnics	Total
AK	5	2		7
AL	2			2
AR	3		1	4
AZ	6			6
CA	4		3	7
CO	1		1	2
FL	3		1	4
GA	2		1	3
HI			1	1
IA	1			1
ID	1			1
IL	2		1	3
IN	1		3	4
KS	1		3	4
KY	1			1
LA	10			10
MI	1		1	2
MN	2		3	5
MO	1		2	3
MS	4			4

State	Commercial	Military	Pyrotechnics	Total
MT	2			2
NC	1			1
ND	4			4
NH	3		1	4
NJ	2			2
NV	4			4
NY	1			1
OK	6			6
OR	2			2
PA	3		2	5
TN	3		1	4
TX	10		1	11
UT	4			4
VA	2			2
VT			2	2
WA	1			1
WI			1	1
WV	2			2
WY	4			3
Grand Total	105	2	29	136

Figure 27. Explosives Loss Types per State - 2017

CONTACT INFORMATION

Contact Information

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TO REQUEST ADDITIONAL INFORMATION, PLEASE SEND AN EMAIL TO:

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