SENATE COMMITTEE ON PUBLIC SAFETY

Senator Loni Hancock, Chair
2015 - 2016 Regular

Bill No:	AB 1662	**Hearing Date:**	June 21, 2016
Author:	Chau		
Version:	March 3, 2016		
Urgency:	No	**Fiscal:**	Yes
Consultant:	MK		

Subject: ***Unmanned Aircraft Systems: Accident Reporting***

HISTORY

Source: Author

Prior Legislation: SB 167 (Gaines) not heard 2015
SB 170 (Gaines) Vetoed 2015
SB 262 (Galgiani) Failed Senate Judiciary 2015
SB 263 (Gaines) not heard 2015
SB 271 (Gaines) Vetoed 2015
AB 56 (Quirk) inactive Senate Floor
SB 15 (Padilla) failed Assembly Public Safety 2014
AB 1327 (Gorell) Vetoed 2014

Support: Association of California Water Agencies; California Fire Chiefs Association; California Police Chiefs Association; DJI; Fire Districts Association of California; San Diego International Airport

Opposition: Electronic Frontier Foundation

Assembly Floor Vote: 67 - 2

PURPOSE

The purpose of this bill is to require the operator of any unmanned aircraft system (UAS) involved in an accident resulting in injury to an individual or damage to property to perform certain duties.

Existing federal regulations require all drone owners to register their drones with the Federal Aviation Administration (FAA). Commercial drone operators, but not recreational drone operators, must also obtain FAA authorization, which is granted on a case-by-case basis.

Existing law establishes a Division of Aeronautics within the California Department of Transportation (Caltrans). (Public Utilities Code §§ 21001 et seq)

Existing federal law, the Aviation Administration Modernization and Reform Act of 2012, requires the Secretary of Transportation to develop a comprehensive plan to safely accelerate the integration of civil unmanned aircraft systems into the national airspace system. The plan is

required to provide for safe integration of civil UAS into national airspace as soon as practicable, not later than September 30, 2015. (112 P.L. 95, 332.)

Existing law requires the driver of any vehicle involved in an accident resulting only in property damage to stop the vehicle immediately at the nearest location that will not impede traffic or jeopardize safety and do the following: locate and notify the owner of the property; provide his or her name and address; and present identification, if requested. If the property owner cannot be found, then the driver must leave a note on the damaged property with his or her name and address along with a statement of the circumstances of the accident, and notify the police. A violation of these requirements is a misdemeanor, punishable by up to 6 months in jail, a $1,000 fine, or both. (Vehicle Code § 20002)

Existing law requires a person who parks and leaves a vehicle which then becomes a runaway vehicle involved in an accident causing property damage to follow the same provisions that apply to other vehicle accidents causing property damage. (Vehicle Code §20002(b))

This bill requires the operator of the UAS involved in an accident resulting in injury to an individual or damage to property shall immediately land the aircraft at the nearest location that will not jeopardize the safety of others.

This bill requires the operator to present his or her valid identification and his or her name and current residence address to the injured individual.

This bill requires the operator to locate and notify the owner or person in charge of the damaged property of the name and address of the operator and, upon being requested to do so, present his or her valid identification and his or her name and current residence address to the other property owner or person in charge of the damaged property.

This bill requires the operator to leave a written notice in a conspicuous place on the damaged property giving the name and address of the operator and a statement of the circumstances of the accident and notify the police department or the sheriff's department of the jurisdiction where the damage occurred.

This bill makes a violation of these requirements a misdemeanor, punishable by up to 6 months in jail, a $1,000 fine, or both.

This bill exempts from these requirements law enforcement and a UAS operated under specific authorization from the Federal Aviation Administration (FAA), in accordance with the terms and conditions of that authorization.

This bill defines "unmanned aircraft" and "unmanned aircraft system" consistent with federal law.

RECEIVERSHIP/OVERCROWDING CRISIS AGGRAVATION

For the past several years this Committee has scrutinized legislation referred to its jurisdiction for any potential impact on prison overcrowding. Mindful of the United States Supreme Court ruling and federal court orders relating to the state's ability to provide a constitutional level of health care to its inmate population and the related issue of prison overcrowding, this Committee

has applied its "ROCA" policy as a content-neutral, provisional measure necessary to ensure that the Legislature does not erode progress in reducing prison overcrowding.

On February 10, 2014, the federal court ordered California to reduce its in-state adult institution population to 137.5% of design capacity by February 28, 2016, as follows:

- 143% of design bed capacity by June 30, 2014;
- 141.5% of design bed capacity by February 28, 2015; and,
- 137.5% of design bed capacity by February 28, 2016.

In December of 2015 the administration reported that as "of December 9, 2015, 112,510 inmates were housed in the State's 34 adult institutions, which amounts to 136.0% of design bed capacity, and 5,264 inmates were housed in out-of-state facilities. The current population is 1,212 inmates below the final court-ordered population benchmark of 137.5% of design bed capacity, and has been under that benchmark since February 2015." (Defendants' December 2015 Status Report in Response to February 10, 2014 Order, 2:90-cv-00520 KJM DAD PC, 3-Judge Court, *Coleman v. Brown, Plata v. Brown* (fn. omitted).) One year ago, 115,826 inmates were housed in the State's 34 adult institutions, which amounted to 140.0% of design bed capacity, and 8,864 inmates were housed in out-of-state facilities. (Defendants' December 2014 Status Report in Response to February 10, 2014 Order, 2:90-cv-00520 KJM DAD PC, 3-Judge Court, *Coleman v. Brown, Plata v. Brown* (fn. omitted).)

While significant gains have been made in reducing the prison population, the state must stabilize these advances and demonstrate to the federal court that California has in place the "durable solution" to prison overcrowding "consistently demanded" by the court. (Opinion Re: Order Granting in Part and Denying in Part Defendants' Request For Extension of December 31, 2013 Deadline, NO. 2:90-cv-0520 LKK DAD (PC), 3-Judge Court, *Coleman v. Brown, Plata v. Brown* (2-10-14). The Committee's consideration of bills that may impact the prison population therefore will be informed by the following questions:

- Whether a proposal erodes a measure which has contributed to reducing the prison population;
- Whether a proposal addresses a major area of public safety or criminal activity for which there is no other reasonable, appropriate remedy;
- Whether a proposal addresses a crime which is directly dangerous to the physical safety of others for which there is no other reasonably appropriate sanction;
- Whether a proposal corrects a constitutional problem or legislative drafting error; and
- Whether a proposal proposes penalties which are proportionate, and cannot be achieved through any other reasonably appropriate remedy.

COMMENTS

1. Need for This Bill

According to the author:

> Drones are widely available to the public. Retail recreational drones can be outfitted with cameras and currently range from roughly $300 to $1,500. The Federal Aviation Administration (FAA) estimates that nearly one million drones

(also known as unmanned aircraft systems (UAS)), were sold during the holiday season. In December 2015, in anticipation of an influx of drones in the skies, the FAA issued new rules requiring hobbyists to register their drones.

Useful commercial applications for drones are growing exponentially. Drones give the news media economical and environmentally-friendly access to aerial views of traffic, storms, and other events when compared to the current use of helicopters and other manned aircraft. Drones are being used in the agricultural industry to observe and measure crops while conserving resources and avoiding the use of heavy equipment. They also show great promise for use in commercial delivery and communications.

Despite the myriad practical applications for UAS, there is an undisputed need for clear rules to protect public safety as more drones enter the skies. UAS equipped with cameras, microphones, Internet connections, and remote controls have enormous potential to invade personal space and cause personal injury and property damage if systems fail or operators use them irresponsibly over crowded public areas, such as city streets, parks and public events.

With the increasing usage of drones we are seeing more drone accidents. For, example, a drone crashed into a power line near Sunset Boulevard in West Hollywood which knocked out power to 600-700 homes. In September 2015, an 11-month-old baby was injured in Pasadena, California after she was struck on the head by shrapnel from a hobbyist's drone that crashed near her stroller. According to news reports, the 24-year-old drone hobbyist, who was using his drone to view a nearby public screening of The Princess Bride, did the right thing by rushing over to the accident scene to help. But such a response was not required by law, and the incident was only one of many drone crashes and near misses reported in recent months. The Democrat & Chronicle, part of the USA Today Network, maintains a public database of drone incidents throughout the United States: http://rochester.nydatabases.com/map/domestic-drone-accidents.

Under current law, motor vehicle drivers are required to stop and provide identification and their contact information if they are involved in a vehicle accident that causes injury or property damage. An involved driver who flees the scene of an accident may also be charged with a misdemeanor if the accident involved property damage or a felony if the accident involved personal injury.

AB 1662 applies the "hit and run" law to drones since they are just as capable as cars are of causing personal injury and property damage when they fall out of the sky or hover too close to people.

2. Federal Law

Existing federal law vests FAA with the authority to regulate airspace in all states. In 2012, FAA was required by Congress to plan for the safe integration of UAS operation into the national airspace system by September 30, 2015, and to develop and implement certification requirements

for the operation of UASs in the national airspace system. A UAS includes both an unmanned aircraft, commonly referred to as a drone, and all of the associated support equipment, control

stations, data links, telemetry, and communications and navigation equipment necessary to operate the unmanned aircraft. A UAS can be flown either by a pilot via a ground control system or autonomously through use of an on-board computer.

3. Notification if UAS Causes Injury or Damage

This bill would require the operator of a UAS involved in an accident to land the vehicle and provide specified information to other parties involved in the accident, consistent with the current requirements placed on a driver involved in a motor vehicle accident. The requirements and penalties associated with this bill mirror existing statutes relating to hit-and-run accidents, such as the requirement to leave a note with identifying information if the accident results only in property damage.

Unmanned aircraft systems are widely available to the public, and retail systems outfitted with cameras now range from roughly $300 to $1,500. The FAA estimates that nearly one million UASs were sold during the December 2015 holiday season.

In anticipation of the influx of UAS in the skies, the FAA issued new rules in 2015 requiring any UAS weighing between one half pound and 55 pounds, including payloads such as on-board cameras, to be registered with the FAA by February 19, 2016. UAS owners must be at least 13 years old to register and must provide their name, home address, and email address. Upon registration under this requirement, UAS owners receive a Certificate of Aircraft Registration/Proof of Ownership along with a unique identification number, which must be marked or affixed to the unmanned aircraft. This unique identifier can then be used to look up the UAS owner in the event of an accident. These registration rules apply only to "model aircraft," i.e., recreational UASs not used for any commercial purpose. The FAA is currently in the process of adopting rules regulating the use of commercial UASs, which currently may only be authorized by the FAA on a case-by-case. According to FAA Administrator Michael Huerta, the FAA now has more than 400,000 UAS registrants in the model aircraft category, which surpasses the 320,000 piloted airplanes currently registered with the FAA.

While there is little existing law at the state level governing the use of UAS, it is unclear what effect upcoming FAA regulations will have on California's ability to regulate drones. Once the FAA has finished promulgating regulations, a future court may find that those regulations preempt certain state laws. The FAA recently issued a document on state and local regulation of UASs, and stated that laws traditionally related to state and local police power – including land use, zoning, privacy, trespass, and law enforcement operations – generally are not subject to federal regulation.

This bill would appear to fall within the police power, because it establishes safety and accident reporting standards to help law enforcement resolve personal injury and property damage accidents involving drones.

4. Support

DJI, a manufacturer of consumer and commercial unmanned aircraft, supports this bill stating:

> While injuries and property damage involving drones remain quite rare, AB 1662 ensures that the operator of any drone involved in such an incident can be held accountable. Accountability is an important ingredient to safe and responsible

operation, and one that DJI fully supports. Moreover, we applaud the author's approach of modeling existing law regarding similar incidents involving ground-based vehicles, establishing consistent and predictable policy for operators and local law enforcement alike.

5. Opposition

The Electronic Frontier Foundation Opposes this bill stating:

> To begin with, we agree that in most cases having a reporting requirement for accidents involving UAS (commonly known as drones) is in the public interest. However, there are scenarios where such a reporting requirement does not make sense. For example, many Californians participate in recreational drone combat competitions (sometimes referred to as "Game of Drones").[1] In these competitions, the goal is to damage the other person's drone so that it can no longer fly, while ensuring that your own drone stays in the air. These competitions typically take place in controlled indoor or outdoor environments, between individuals who are well aware of the risk of damage to their property (specifically their drones) and for whom doing quick repairs to fix damage is actually part of the fun of the competition.
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> Therefore, we suggest that AB 1662 be amended so that damage done to property during recreational drone activities does not trigger its reporting requirement. To be clear, such a carve-out should only apply if the damage is done to property—not persons—and only when the damaged property belongs to someone affiliated with or taking part in the recreational activity (i.e. not the property of mere spectators or passersby).
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> The second flaw in the bill is section 24455(c)(1), which excludes law enforcement officers and first responders from the bill's reporting requirements (i.e. section 24455(a)(1)-(3)). While we understand that in some situations, it may be necessary for this class of public servants to continue operating their drone without interruption, even after causing damage to people or property, we feel that a total exclusion is unwarranted and unnecessary.
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> Therefore, we suggest that AB 1662 be amended so that the same reporting requirements apply to law enforcement and first responders as all others, except that they may delay complying with the reporting requirements if doing so immediately would directly lead to additional damage to property or injury to people. In other words, a law enforcement officer could continue flying his drone if he were using it to track an armed suspect, and wait to find the injured party until after the suspect was apprehended. Such a carve out should not hinder law enforcement or first responders in any way, while still preserving their duty to find and exchange information with people injured by their UAS operations.
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> Finally, the exception for people operating UAS pursuant to specific FAA authorizations should also be removed, as having an authorization from the FAA does not change the fact that the onus to report the accident and provide identifying

[1] See, e.g., http://aerialsports.tv/combat/

information should be on the UAS operator, not the person who suffered injury or whose property was damaged.

Should this bill be amended to make it clear that people participating in a drone combat competition does not have to report damage to another drone?

Should this bill be amended to delete the exemption for law enforcement and fire departments in this bill and require them to report damage or injury once the official use of the UAS has been completed?

-- END –