

NEIL ABERCROMBIE
GOVERNOR



DWIGHT TAKAMINE
DIRECTOR

AUDREY HIDANO
DEPUTY DIRECTOR

STATE OF HAWAII
DEPARTMENT OF LABOR AND INDUSTRIAL RELATIONS

830 PUNCHBOWL STREET, ROOM 321
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February 15, 2012

The Honorable Henry Aquino, Chair
Committee on Public Safety and Military Affairs
House of Representatives
State Capitol, Room 419
Honolulu, Hawaii 96813

Dear Chair Aquino:

Subject: H.B. 2113 Relating to Fire Protection

I am Kenneth G. Silva, Chair of the State Fire Council (SFC) and Fire Chief of the Honolulu Fire Department (HFD). The SFC and the HFD support the intent of H.B. 2113, which proposes to ban the use, sale, and possession of aerial luminaries, which are commonly known as sky lanterns, Hawaii lanterns, and flying luminaries.

We believe the uncontrolled releases of these devices pose a potential danger to life and property and recommend they be prohibited in the state. These devices are paper lanterns containing a small candle or other fuel source that heats air inside the lantern, thus causing the lantern to rise several hundred feet and remain airborne until the heat source diminishes; at which time the lantern descends. This uncontrolled, open-flame device can land on combustible vegetation, buildings, or power lines and interfere with aircraft flight patterns. Death or serious injury to livestock has been reported in many countries after the sky lantern remains were consumed. In Great Britain, numerous fires have been reported to buildings and crops. There is a ban of aerial luminaries in Georgia, Australia, and parts of Germany.

The SFC and the HFD urge your committee's support on the passage of H.B. 2113.

Should you have any questions, please contact SFC Administrator Socrates Bratakos at 723-7151 or sbratakos@honolulu.gov.

Sincerely,

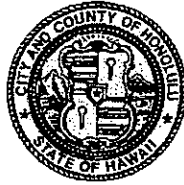
A handwritten signature in black ink that reads "Kenneth G. Silva".

KENNETH G. SILVA
Chair

KGS/LR:ch

POLICE DEPARTMENT
CITY AND COUNTY OF HONOLULU

801 SOUTH BERETANIA STREET · HONOLULU, HAWAII 96813
TELEPHONE: (808) 529-3111 · INTERNET: www.honolulu-pd.org



PETER B. CARLISLE
MAYOR

LOUIS M. KEALOHA
CHIEF

DAVE M. KAJIHIRO
MARIE A. MCGAULEY
DEPUTY CHIEFS

OUR REFERENCE

February 16, 2012

The Honorable Henry J.C. Aquino, Chair
and Members
Committee on Public Safety and Military Affairs
House of Representatives
State Capitol
Honolulu, Hawaii 96813

Dear Chair Aquino and Members:

Subject: House Bill 2113, Relating to Fire Protection

I am Raymond Ancheta, Major of the Kapolei Station, District 8, Honolulu Police Department (HPD), City and County of Honolulu.

The HPD supports House Bill 2113, which bans the ignition, possession, selling, and use of aerial luminaries.

The HPD stands with the Honolulu Fire Department in banning this inherently dangerous form of fireworks. The concept of allowing an open flame to float to wherever the wind may blow presents a potential problem with brushfires along the Leeward Coast and other areas with dry vegetation.

The HPD requests that your committee support the passage of House Bill 2113.

Sincerely,

A handwritten signature in black ink, appearing to read "Raymond Ancheta", written over a horizontal line.

RAYMOND ANCHETA, Major
District 8

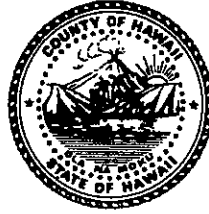
APPROVED BY:

A handwritten signature in black ink, appearing to read "Louis M. Kealoa", written over a horizontal line.

LOUIS M. KEALOHA
Chief of Police

Serving and Protecting With Aloha

William P. Kenoi
Mayor



Darren J. Rosario
Fire Chief
Renwick J. Victorino
Deputy Fire Chief

County of Hawai'i

FIRE DEPARTMENT

25 Aupuni Street • Suite 2501 • Hilo, Hawai'i 96720

(808) 932-2900 • Fax (808) 932-2928

February 14, 2012

The Honorable Henry Aquino, Chair
Committee on Public Safety and Military Affairs
House of Representatives
State Capitol, Room 419
Honolulu, Hawaii 96813

Dear Chair Aquino:

Subject: H.B. 2113 Relating to Fire Protection

I am Darren J. Rosario, member of the State Fire Council (SFC) and Fire Chief of the Hawaii Fire Department (HFD). The SFC and the HFD support the intent of H.B. 2113, which proposes to ban the use, sale, and possession of aerial luminaries commonly known as sky lanterns, Hawaii lanterns, and flying luminaries.

We believe the uncontrolled release of these devices poses a potential danger to life and property and recommend they be prohibited in the state. These devices are paper lanterns containing a small candle or other fuel source that heats air inside the lantern causing the lantern to rise for several hundred feet and remain airborne until the heat source diminishes, at which time the lantern descends. This uncontrolled open flame device can land on combustible vegetation or buildings, power lines, and interfere with aircraft flight patterns. Death or serious injury to livestock has been reported in many countries when the sky lantern remains are consumed. There is a ban of aerial luminaries in Australia, in parts of Germany and in the state of Georgia. In Great Britain, numerous fires have been reported to buildings and crops.

The SFC and the HFD urge your committee's support on the passage of H.B. 2113.

Should you have any questions, please call SFC Administrator Socrates Bratakos at 723-7151.

Sincerely,

Darren J. Rosario
Member



Bernard P. Carvalho, Jr.
Mayor



Robert F. Westerman
Fire Chief

Gary K. Heu
Managing Director

John T. Blalock
Deputy Fire Chief

KAUA'I FIRE DEPARTMENT
County of Kaua'i, State of Hawai'i

3083 Akahi Street, Suite 101, Lihu'e, Hawai'i 96766
TEL (808) 241-4980 FAX (808) 241-6508

February 14, 2012

The Honorable Henry Aquino, Chair
Committee on Public Safety and Military Affairs
House of Representatives
State Capitol, Room 419
Honolulu, Hawaii 96813

Dear Chair Aquino:

Subject: H.B. 2113 Relating to Fire Protection

I am Robert F. Westerman, Fire Chief of the Kauai Fire Department (KFD) and a member of the State Fire Council (SFC). The KFD and the SFC support the intent of H.B. 2113, which proposes to ban the use, sale, and possession of aerial luminaries commonly known as sky lanterns, Hawaii lanterns, and flying luminaries.

We believe the uncontrolled release of these devices poses a potential danger to life and property and recommend they be prohibited in the state. These devices are paper lanterns containing a small candle or other fuel source that heats air inside the lantern causing the lantern to rise for several hundred feet and remain airborne until the heat source diminishes, at which time the lantern descends. This uncontrolled open flame device can land on combustible vegetation or buildings, power lines, and interfere with aircraft flight patterns. Death or serious injury to livestock has been reported in many countries when the sky lantern remains are consumed. There is a ban of aerial luminaries in Australia, in parts of Germany and in the state of Georgia. In Great Britain, numerous fires have been reported to buildings and crops.

The KFD and the SFC urge your committee's support on the passage of H.B. 2113.

Please call me at (808) 241-4980 should you have any questions regarding this matter.

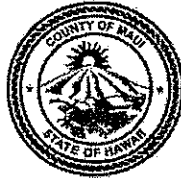
Sincerely,

A handwritten signature in cursive script that reads "Robert Westerman".

Robert Westerman
Fire Chief, County of Kaua'i

RFW/eld

ALAN M. ARAKAWA
MAYOR



JEFFREY A. MURRAY
CHIEF

ROBERT M. SHIMADA
DEPUTY CHIEF

COUNTY OF MAUI
DEPARTMENT OF FIRE AND PUBLIC SAFETY

200 DAIRY ROAD
KAHULUI, MAUI, HAWAII 96732
(808) 270-7561
FAX (808) 270-7919
EMAIL: fire.dept@mauicounty.gov

February 14, 2012

The Honorable Henry Aquino, Chair
Committee on Public Safety and Military Affairs
House of Representatives
State Capitol, Room 419
Honolulu, Hawaii 96813

Dear Chair Aquino:

Subject: H.B. 2113 Relating to Fire Protection

I am Jeffrey A. Murray, Fire Chief of the County of Maui, Department of Fire & Public Safety (MFD) and a member of the State Fire Council (SFC). The MFD and the SFC support the intent of H.B. 2113, which proposes to ban the use, sale, and possession of aerial luminaries commonly known as sky lanterns, Hawaii lanterns, and flying luminaries.

We believe the uncontrolled release of these devices poses a potential danger to life and property and recommend they be prohibited in the state. These devices are paper lanterns containing a small candle or other fuel source that heats air inside the lantern causing the lantern to rise for several hundred feet and remain airborne until the heat source diminishes, at which time the lantern descends. This uncontrolled open flame device can land on combustible vegetation or buildings, power lines, and interfere with aircraft flight patterns. Death or serious injury to livestock has been reported in many countries when the sky lantern remains are consumed. There is a ban of aerial luminaries in Australia, in parts of Germany and in the state of Georgia. In Great Britain, numerous fires have been reported to buildings and crops.

The MFD and the SFC urge your committee's support on the passage of H.B. 2113.

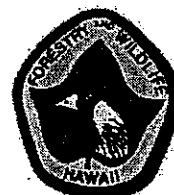
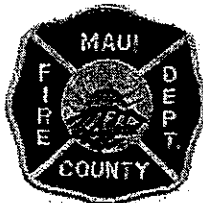
Should you have any questions, please call SFC Administrator Socrates Bratakos at 723-7151.

Sincerely,

A handwritten signature in black ink, appearing to read "Jeffrey A. Murray", is written over a printed name and title.

JEFFREY A. MURRAY
Fire Chief

MAUI WILDFIRE COORDINATING GROUP



Wayne F. Ching, Chair Division of Forestry & Wildlife 1151 Punchbowl St., Rm. 325
Honolulu, HI 96813

February 14, 2012

The Honorable Henry Aquino, Chair
Committee on Public Safety and Military Affairs
House of Representatives
State Capitol, Room 419
Honolulu, Hawaii 96813

Dear Chair Aquino:

Subject: H.B. 2113 Relating to Fire Protection

I am Wayne F. Ching, Chair of the Maui Wildfire Coordinating Group (MWCG) and Fire Management Officer of the Department of Land & Natural Resources, Division of Forestry and Wildlife (DOFAW). The MWCG and DOFAW supports the intent of H.B. 2113, which proposes to ban the use, sale, and possession of aerial luminaries commonly known as sky lanterns, Hawaii lanterns, and flying luminaries.

The uncontrolled release of the luminary device poses a potential danger to life and property. Once released, these paper lanterns will eventually descend with the heat source (candle) still intact. This uncontrolled open flame device has the potential to ignite vegetation which in turn can result in an uncontrolled wildfire. The potential for ignition also exists for buildings as well as power lines. These luminaries also have the potential to interfere with aircraft flight patterns.

The MWCG and the DOFAW urge your committee's support on the passage of H.B. 2113.

Very truly yours,

WAYNE F. CHING
Chair

Testimony before the House Committee on Public Safety & Military Affairs

By Ken T. Morikami
Manager, Safety and Security Department
Hawaiian Electric Company, Inc.

February 16, 2012

House Bill 2113
Relating to Fire Protection

Chair Henry J. C. Aquino, Vice Ty Cullen and Members of the Committee:

My name is Ken Morikami and I am testifying on behalf of the Hawaiian Electric Company and its subsidiaries, Hawaii Electric Light Company and Maui Electric Company.

Position:

We support HB2113 which proposes a total ban on aerial luminaries.

Comments:

Aerial luminaries pose a significant risk to our electric power system. Many of our facilities are surrounded with vegetation, which if ignited, could lead to a catastrophic fire, causing widespread damage to homes, businesses and our facilities. This could result in power outages as well as impact the safety and security of home and business owners.

These devices could also contact and damage our power lines and equipment within our power plants and substations in areas across Oahu. These incidents will require emergency response from our crews and other first responders, who would be exposed to unnecessary safety and hazardous conditions.

Thank you for the opportunity to testify on this matter.

February 15, 2012

Henry J.C. Aquino, Chair
House Committee on Public Safety and Military Affairs
State of Hawaii

Dear Representative Aquino,

I would like to take this opportunity to introduce myself, our Hawaii Fire Chiefs Association, and ask for your consideration and support of House Bill 2113 regarding the ban on the sale and use of "aerial luminaries".

My name is Darryl Oliveira and I am the recently retired (August 1, 2011) Fire Chief of the County of Hawaii and the current President of the Hawaii Fire Chiefs Association (HFCA). The HFCA is a professional association and a registered and incorporated 501(c)(3) non-profit organization. Our Executive Officers, Board of Directors, and general membership is comprised of executive or chief officers of the various County, State, Federal, and Private Industry fire protection agencies and organizations within our state. The HFCA is also an affiliate organization of the Western Fire Chiefs Association and the International Association of Fire Chiefs.

Our organization's mission is one of advocacy for the fire service both locally as well as at the regional and national level. In keeping with our mission, the HFCA would like to request your consideration and passage of House Bill 2113. There is sufficient evidence to support this measure as a means of reducing the hazard and risk for potential fires in every one of our island communities. In addition, the HFCA has been working with our two affiliate organizations on this particular matter as it has become an issue of concern in many other states and communities.

Therefore on behalf of the Hawaii Fire Chiefs Association I would like to ask for your support and passage of this measure as it will reduce the risk for potential fires and provide for the safety of our community and our first responders.

Sincerely,

Darryl Oliveira

February 15, 2012

Henry J.C. Aquino, Chair
House Committee on Public Safety and Military Affairs
State of Hawaii

Dear Representative Aquino,

I would like to take this opportunity to introduce myself and ask for your consideration and support of House Bill 2113 regarding the ban on the sale and use of "aerial luminaries".

My name is Darryl Oliveira and I am the recently retired (August 1, 2011) Fire Chief of the County of Hawaii. During my thirty plus year career in the fire service and my tenure as the Fire Chief I had been directly involved in the development and implementation of a variety of measures aimed at insuring the health and safety of our residents, visitors, and our first responder community. One of the issues that arose during the New Year Holiday of 2011 was the sale and use of "aerial luminary" devices sold under product names of "Sky Lanterns" and "Hawaiian Lanterns". These two products were very similar in design and composition and functioned basically in the same manner. These aerial luminary products can be best described as novelty hot air balloons that are propelled by an ignitable solid fuel pad which generates sufficient heat and hot air to fill the tissue paper balloon and carry the entire setup aloft and adrift as the ambient winds allow.

The Hawaii Fire Department and specifically the Fire Prevention Bureau conducted a hazard/risk assessment of these devices and concluded that; The release and uncontrolled transport of an ignited solid fuel, which burns for periods in excess of ten (10) minutes, presents with a significant fire hazard and risk to the health and safety of our community. I have attached a summary report of the product testing and assessment that was conducted and can provide additional information as well as video recording of the testing should you find that necessary or essential for your consideration of this bill.

I would like to close with asking for your support and passage of this measure as it will reduce the risk for potential fires and provide for the safety of our community.

Sincerely,

Darryl Oliveira

**Hawaii Fire Department
“Aerial Luminary”
Fire Hazard and Risk Assessment Project**

Project Statement:

During the course of the 2011 New Year Holiday season the Hawaii Fire Department encountered the retail sales of a novelty device hereinafter referred to as “aerial luminaries”. These devices were being marketed and sold under two distinct product names; Hawaiian Lantern and Sky Lantern. These aerial luminaries were fundamentally small scale hot air balloons that were propelled by an ignitable fuel pad. Both products were comprised of a light weight paper canopy or balloon with an attached wire frame base that held a solid fuel pad. The fuel pad, when ignited produced sufficient quantities of heated air and vapors to fill the canopy or balloon and carry it aloft. The actual chemical composition of the fuel pad is unknown and currently being researched however it appears to be a liquid or wax impregnated paper or cardboard pad. (See figure 1.1)

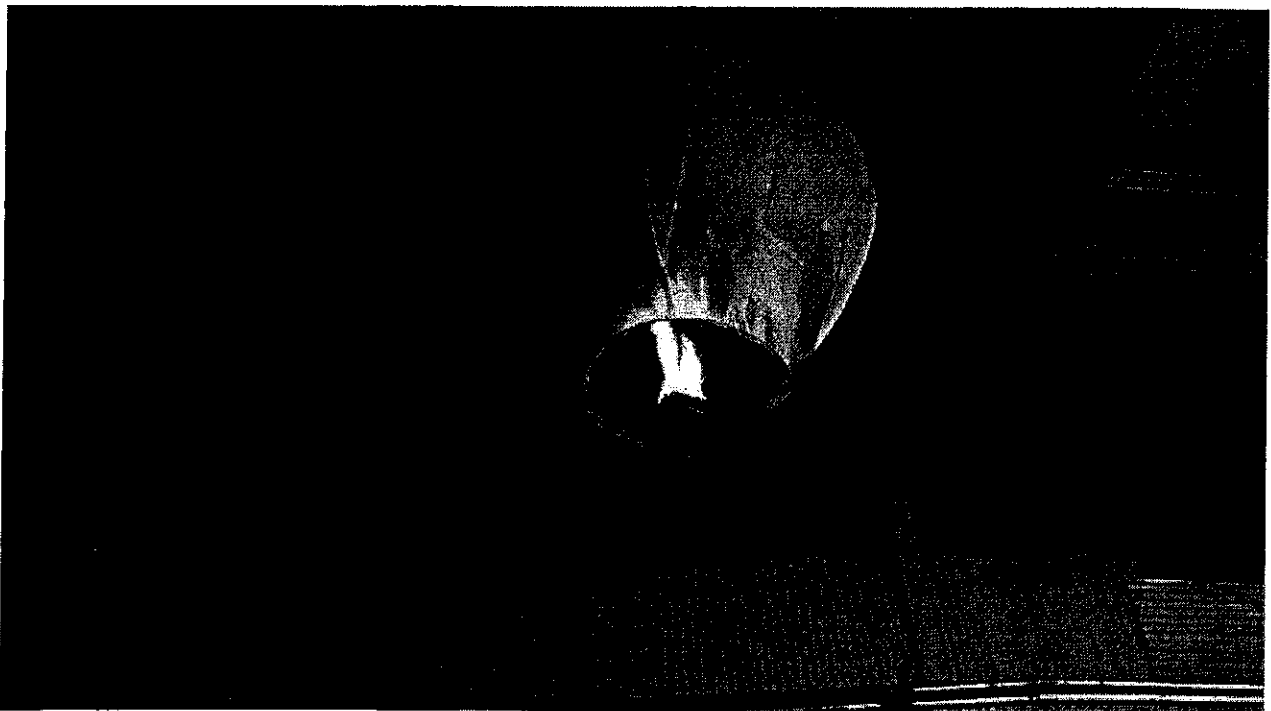


Figure 1.1

Given that these devices operated with an open flame and were designed to be released un-tethered and transported by ambient winds, the Hawaii Fire Department initiated a gross hazard risk assessment and subsequently took the position that the devices posed a significant fire safety hazard and should be prohibited from sale and use. In consultation with the County of Hawaii Managing Director and Deputy Corporation Counsel, the decision was made to purchase all remaining product inventory and through an aggressive media campaign request public compliance and refrain from use.

In an effort to further qualify the concerns for public safety, the following organizations and agencies were contacted for comment:

1. National Fire Protection Association
2. International Association of Fire Chiefs
3. Western Fire Chiefs Association
4. Federal Aviation Administration
5. Consumer Product Safety Commission

Each of the agencies or organizations contacted readily commented that they were unfamiliar with the product however based on the description of its use and function, all consistently expressed a concern for safety and agreed that the devices presented with among other risks, a significant fire hazard.

To responsibly validate the perceived safety concerns it was determined that a product test would be conducted utilizing the inventory that was in the possession of the fire department. This project is a representation of that product testing process and outcomes.

Project Goal:

Safely conduct "live fire" testing of both products under controlled (indoor) and typical ambient weather (outdoor) conditions to validate or dispute the concerns for fire safety.

Project Objectives:

1. Insure the safety of the public throughout the product testing process.
2. Conduct product testing under both controlled and ambient weather conditions. The tests would measure the following:
 - a. Duration of time from ignition to termination of flame production (cessation of flame production however continued smoldering activity observed).
 - b. Duration of time from ignition to complete extinguishment (all smoldering has stopped).
 - c. Duration of time device remains aloft or airborne.
 - d. Estimated average altitude attained by device.
 - e. Estimated average lateral travel or distance of travel of the device.

Testing Process:

1. A random sample of each product was identified and selected for testing.
2. The indoor or controlled testing was conducted in an industrial warehouse occupied by the Hawaii Fire Department with necessary fire protection and suppression capabilities on hand. The warehouse facility is a steel structure with an open floor area of approximately five thousand square feet. Access and ventilation was provided utilizing a single roll up door and it was further determined that the airflow through this opening would not significantly alter or affect the performance of the tests or the outcomes.
3. Outdoor testing was conducted in the outskirts of the Hilo proper area. The site was selected based on relative ease of access, open space, low vegetation fuel load, high fuel moisture content, low population density, safe distance from airport and air traffic routes, and representation of typical community weather and environment.
4. All product testing was photographed as well as videoed for historical record and accountability.
5. All products were ignited with a typical consumer lighter. No other accelerants or fuels were introduced.
6. All time measurements were conducted utilizing more than one time monitor and stop watch.
7. Altitude was estimated using physical references and lateral distance of travel calculated using portable Global Positioning System (GPS) units.

Testing Outcomes (Indoor/controlled):

Average duration of time from ignition to termination of flame production:

| | |
|------------------|----------------------|
| Hawaiian Lantern | 4 minutes 53 seconds |
| Sky Lanterns | 5 minutes 18 seconds |

Average duration of time from ignition to complete extinguishment:

| | |
|------------------|-----------------------|
| Hawaiian Lantern | 10 minutes 30 seconds |
| Sky Lantern | 10 minutes 16 seconds |

Average duration of time device remained airborne:

| | |
|------------------|----------------------|
| Hawaiian Lantern | 4 minutes 26 seconds |
| Sky Lantern | 4 minutes 43 seconds |

Testing Outcomes (Outdoor/ambient weather):

Average duration of time device remained airborne:

| | |
|------------------|----------------------|
| Hawaiian Lantern | 4 minutes 37 seconds |
| Sky Lantern | 4 minutes 45 seconds |

Average estimated altitude attained:

| | |
|------------------|----------|
| Hawaiian Lantern | 400 feet |
| Sky Lantern | 500 feet |

Average estimated distance traveled (lateral):

| | |
|------------------|-----------|
| Hawaiian Lantern | 1025 feet |
| Sky Lantern | 1150 feet |

Other observations:

1. Both products behaved in the same manner and responded to the changes in wind direction and speed accordingly. It was noted that the variation in wind speed or force did affect the rate of climb. Essentially the stronger the winds the slower the rate of climb as most of the movement and travel was lateral.
2. Both products were observed to descend with active burning continuing although the intensity of the burning and the observed flame lengths diminished significantly. Nonetheless both products when touching down continued to generate sufficient heat output to ignite vegetation or other combustible materials.
3. The altitude at which the devices reached was sufficient to affect local air traffic. As observed with one release, a passing small single engine aircraft approached the device and appeared to follow it for a brief period of time and at an altitude that was in compliance with FAA regulations for visual flight rules operations.

Summary and conclusion:

The aerial luminaries as tested produce sufficient heat output and perform in such a manner that it poses a risk and potential for a fire. The devices are basically uncontrolled and subject to the influence of ambient wind conditions and the operator or person releasing the device may have little to no control of its path of travel and ultimate landing or contact with possible ignitable materials. The products contain sufficient fuel to provide for a significant rate and distance of travel and if deployed as intended during night conditions pose a risk of setting down or landing undetected and continue to burn for

several minutes. Therefore based on the lack of controls, type of burn activity observed and measured, and the typical weather and climate, environmental factors such as geography, topography and natural fuels and fuel loading in Hawaii, the sale and use of this product should be restricted.