INVESTIGATION REPORT

CASE NUMBER: 17CAVNC103338
CASE NAME: KOENIGSTEIN
DATE: December 4, 2017
INCIDENT TYPE: Wildland Fire
INCIDENT INVESTIGATORS:

Jon BERGH, Fire Investigator – VCFD
Ryan MILLER, Fire Fighter – VCFD
Jace CHAPIN, Battalion Chief – CAL FIRE
Kenneth RUSSELL, Fire Captain-Specialist – CAL FIRE
1. VIOLATIONS:

Penal Code § 192

Manslaughter is the unlawful killing of a human being without malice. It is of three kinds:
(b) Involuntary—in the commission of an unlawful act, not amounting to a felony; or in the commission of a lawful act which might produce death, in an unlawful manner, or without due caution and circumspection. This subdivision shall not apply to acts committed in the driving of a vehicle.

Penal Code § 452

A person is guilty of unlawfully causing a fire when he recklessly sets fire to or burns or causes to be burned, any structure, forest land or property.
(a) Unlawfully causing a fire that causes great bodily injury is a felony punishable by imprisonment in the state prison for two, four or six years, or by imprisonment in the county jail for not more than one year, or by a fine, or by both such imprisonment and fine.
(b) Unlawfully causing a fire that causes an inhabited structure or inhabited property to burn is a felony punishable by imprisonment in the state prison for two, three or four years, or by imprisonment in the county jail for not more than one year, or by a fine, or by both such imprisonment and fine.
(c) Unlawfully causing a fire of a structure or forest land is a felony punishable by imprisonment in the state prison for 16 months, two or three years, or by imprisonment in the county jail for not more than six months, or by a fine, or by both such imprisonment and fine.
(d) Unlawfully causing a fire of property is a misdemeanor. For purposes of this paragraph, unlawfully causing a fire of property does not include one burning or causing to be burned his own personal property unless there is injury to another person or to another person's structure, forest land or property.
Health & Safety Code § 13001
Every person is guilty of a misdemeanor who, through careless or negligent action, throws or places any lighted cigarette, cigar, ashes, or other flaming or glowing substance, or any substance or thing which may cause a fire, in any place where it may directly or indirectly start a fire, or who uses or operates a welding torch, tar pot or any other device which may cause a fire, who does not clear the inflammable material surrounding the operation or take such other reasonable precautions necessary to insure against the starting and spreading of fire.

Public Resources Code § 4421
A person shall not set fire or cause fire to be set to any forest, brush, or other flammable material which is on any land that is not his own, or under his legal control, without the permission of the owner, lessee, or agent of the owner or lessee of the land.

General Order 95, 31.1: Design, Construction and Maintenance
Electrical supply and communication systems shall be of suitable design and construction for their intended use, regard being given to the conditions under which they are to be operated, and shall be maintained in a condition which will enable the furnishing of safe, proper and adequate service.

General Order 95, 34: Foreign Attachments
Nothing in these rules shall be construed as permitting the unauthorized attachment, to supply, street light or communication poles or structures, of antennas, signs, posters, banners, decorations, wires, lighting fixtures, guys, ropes and any other such equipment foreign to the purposes of overhead electric line construction.
General Order 95, 49.8: Hardware

All pole line hardware shall be galvanized, otherwise protected by a corrosion-resistant treatment, or shall be composed of material which is corrosion resistant.
On Monday, December 4, 2017, at approximately 7:30 PM, a fire was observed, reported and photographed by Tiarzha TAYLOR in her front yard located at [Address redacted], Santa Paula, California 93060. The Ventura Fire Communications Center (FCC) dispatched units from Ventura County Fire Department (VCFD) to a reported wildland fire. The fire started under extreme fire weather conditions and was later identified as the KOENIGSTEIN fire. Collectively, the THOMAS fire and the KOENIGSTEIN fire consumed 281,893 acres of mixed wildland and 1343 structures destroyed/damaged The THOMAS fire stared before the KOENIGSTEIN fire at approximately 6:23 PM. One civilian fatality and one fire fighter fatality occurred as a result of these two fires. The fires were fully controlled on Wednesday, January 10, 2018 (see attachment #1 thru #4).

TAYLOR heard an “explosion” followed by embers falling from the sky, and observed the fire within minutes after ignition. Fire investigators determined the fire occurred when an energized electrical conductor separated between two power poles in TAYLOR’S front yard. Initial separation arcing and subsequent ground contact resulted in molten aluminum particles falling onto the surrounding vegetation. Investigators examined the scene, documented, photographed and collected sections and parts associated with the involved electrical conductor as evidence. The power lines and equipment responsible for the KOENIGSTEIN fire were owned and operated by Southern California Edison (SCE).
3 - SUSPECT:

S-1 Southern California Edison (SCE)
Corporate Headquarters
9200 Oakdale Avenue, 9th Floor
Los Angeles, CA 91311
Phone: (888) 848-4754

Process Service Agent - SCE
Cristina LIMON
2244 Walnut Grove Avenue
Rosemead, CA 91770
Phone: (888) 848-4754
Christina.Limon@sce.com
4 – VICTIMS & WITNESSES:

VICTIMS:

V-1 Virginia PASOLA
   Civilian

For further information pertaining to PASOLA, contact Ventura County Medical
Examiner’s Office at (805) 641-4400 reference report #1501-17.

V-2 Cory IVERSON
   Fire Apparatus Engineer – CAL FIRE

For further information pertaining to IVERSON, contact Ventura County Medical
Examiner’s Office at (805) 641-4400 reference report #1539-17.

Other Victims:

For a complete list of properties which sustained damage or burned structures
during the THOMAS and/or KOENINGSTEIN fires (see attachment #5). This list
may or may not include damaged land and other miscellaneous burned
properties.
WITNESSES:

W-1 Tiarzha TAYLOR

Can testify to being the first person to hear, see, report and photograph the KOENIGSTEIN fire. Additionally, TAYLOR took photos of the THOMAS fire (see attachment #6).

W-2 Danny EVERETT

Can testify to events associated with the KOENIGSTEIN fire.

W-3 Kevin SCHMIDT

Can testify to hearing a big bang, seeing massive sparks hitting the ground and a fire start. SCHMIDT'S video recorded the KOENIGSTEIN fire at its early stages and he provided the recordings to the Investigation Team (IT) (see attachment #7).
Can testify to observing a fire to the east (later identified as the THOMAS fire), hearing a loud explosion to the west, losing power, and observing flames to the west (later identified as the KOENINGSTEIN fire). BROCK took photos and video recorded the THOMAS fire (see attachment #8).

Can testify to hearing a loud pop and seeing a bright blue flash on top of the power pole associated with the KOENINGSTEIN fire (see attachment #9).

Can testify to being the company officer on the first piece of fire equipment at scene and seeing flashes in the general area of the KOENIGSTEIN fire (see attachment #10).
Can testify to being on the first piece of fire equipment at scene and seeing flashes in the general area of the KOENIGSTEIN fire (see attachment #10).

Can testify to being on the first piece of fire equipment at scene and seeing flashes in the general area of the KOENIGSTEIN fire (see attachment #10).

Can testify to burned and unburned areas surrounding the KOENIGSTEIN fire.

Can testify to being the lead investigator and completing the Fire Investigation Report (LE-80).
W-11 Ryan MILLER
Fire Fighter - VCFD

Can testify to assisting with the overall fire investigation.

W-12 Christine SAQUI
Fire Investigator - VCFD

Can testify to the KOENIGSTEIN fire and the THOMAS fire being two separate incidents.

W-13 Marshall HATCH
Fire Investigator - VCFD

Can testify to the KOENIGSTEIN fire and the THOMAS fire being two separate incidents.

W-14 Gregg DELAROSA
Senior Deputy - Ventura County Sheriff’s Office (VCSO)

Can testify to the KOENIGSTEIN fire and the THOMAS fire being two separate incidents.
W-15 Kenneth RUSSELL
Fire Captain-Specialist - CAL FIRE
Can testify to assisting with the fire investigation.

W-16 Jace CHAPIN
Battalion Chief - CAL FIRE
Can testify to assisting with the fire investigation.

W-17 Daniel VANOVER
Senior Deputy - VCSO
Can testify to scene security (see attachment #11).

W-18 John EISENHARD
Can testify to scene security (see attachment #11).
KOENIGSTEIN  December 4, 2017  17CAVNC103338

W-19 Keith HALL
Senior Deputy - VCSO

Can testify to scene security (see attachment #11).

W-20 Richard MCCOLLUM
Investigations Manager - SCE

Can testify to coordinating efforts between the IT and SCE for the removal and collection of evidence (see attachment #12).

W-21 Patrick WALKER
Fire Fighter II – CAL FIRE

Can testify to scene security (see attachment #13).

LE80 (Rev. 7/2011)  13  Officer Initials Ω
Can testify to using LiDAR in the area identified by the IT. The LiDAR team can explain how the LiDAR functions and the data collected (see attachment #14).

Can testify to using LiDAR in the area identified by the IT. The LiDAR team can explain how the LiDAR functions and the data collected (see attachment #14).

Can testify to coordinating efforts, communications and data request with SCE (see attachment #15).
W-25 Vince BERGLAND
Battalion Chief - CAL FIRE

Can testify to escorting evidence collected from the KOENIGSTEIN fire to the evidence locker at Southern Region Headquarters, Fresno (see attachment #16).
5 – EVIDENCE:

Evidence collection at the KOENIGSTEIN fire began on Tuesday, December 5, 2017, by Jon BERGH and Ryan MILLER. Two pieces of evidence (E-1 & E-2) were collected on Tuesday, December 5, 2017. On Wednesday, December 6, 2017, the IT comprised of BERGH, MILLER, Jace CHAPIN and Kenneth RUSSELL arrived at the fire origin area to continue the investigation and collected evidence (E-3 thru E-11).

On Thursday, December 7, 2017, the IT collected evidence (E-12 thru E-16). On Friday, December 8, 2017, the IT was accompanied by SCE at the KOENIGSTEIN fire for collection of evidence (E-17 thru E-26). The evidence on Friday, December 8, 2017, was tagged by both SCE and the IT with independent tracking tags and tracking numbers. Evidence (E-21 thru E-26) was transferred to SCE (Rick MCCOLLUM), a property receipt and chain of custody was completed by the IT and SCE. Additionally, a property receipt was completed by the IT and TAYLOR for evidence not associated with equipment owned and operated by SCE. The remaining evidence (E-1 thru E-20) was secured and transported in a locked/marked CAL FIRE vehicle escorted by Vince BERGLAND. A chain of custody was completed by the IT team and BERGLAND. All evidence collected on the KOENIGSTEIN fire was transferred to the CAL FIRE evidence locker at Southern Region Headquarters, 1234 East Shaw Avenue, Fresno, CA 93710, on Saturday, December 9, 2017 (see attachment #17 thru #21).

PHYSICAL EVIDENCE

Item #1 – (E-1) Section of ACSR powerline spanning from Pole #729565E to #729566E, cut by MILLER. Section was in contact with the ground in the Specific Origin Area (SOA) and continued downslope. Section was from the center phase and additional evidence associated with the center phase was marked with WHITE tape and tracking tags.
Item #2 – (E-2) Section of raptor guard. Raptor guard was from the center phase and found downslope from the SOA. Section was collected by MILLER, and was found near Pole #729566E.

Item #3 – (E-3) Parallel groove connector. Collected by MILLER. Connector was found in the SOA on the ground near Pole #729566E.

Item #4 – (E-4) Large piece of metal. Metal was determined to possibly be a piece of Edison equipment, and was found in the SOA at the base of Pole #729566E. Collected by MILLER.

Item #5 – (E-5) Square metal nut. Collected by MILLER. Found in the SOA at the base of Pole #729566E.

Item #6 – (E-6) Square metal washer. Collected by MILLER. Found in the SOA at the base of Pole #729566E.

Item #7 – (E-7) Section of wire. Determined to possibly be a piece of Edison equipment. Collected by MILLER. Found in the SOA at the base of Pole #729566E.

Item #8 – (E-8) Melted metal ring. Determined to possibly be a piece of Edison equipment. Collected by MILLER. Found in the SOA at the base near Pole #729566E.

Item #9 – (E-9) Landscape light. Found in the SOA. Light was subjected to fire and heat, and suffered minor damage. Collected by MILLER. Light was collected as a comparison to E-10 and E-11.
Item #10 - (E-10) Landscape light. Found in the SOA. Light was subjected to fire and heat, and suffered significant heat damage, including discoloration and malformation. Collected by MILLER. Light was collected as a comparison to E-9 and E-11.

Item #11 - (E-11) Landscape light with possible electrical damage. Light found in the Ignition Area (IA), with possible electrical arc damage noted on the top of the light. Collected by MILLER. Light was found in proximity to E-1.

Item #12 - (E-12) Metal slag. Small piece of metal slag found on brick walkway immediately adjacent to E-11. Slag was found in the IA. Collected by MILLER.

Item #13 - (E-13) Melted metal fragments. Fragments were found in the dirt, immediately adjacent to E-11. Fragments were found by combing through IA. Collected by MILLER.

Item #14 - (E-14) Glass fragments from landscape light bulb. Fragments were found in the dirt immediately adjacent to E-11. Fragments were found by combing through IA. Collected by MILLER.

Item #15 - (E-15) Spring from damaged light. Spring was in the dirt immediately adjacent to E-11. Collected using a magnet over the IA as well as a comb used to search the IA. Spring was in two pieces, which showed beading on one end. Collected by MILLER.

Item #16 - (E-16) Wiring connection for E-11. Wiring was in the dirt immediately below E-11. Collected by MILLER.
Item #17 - (E-17) Top of power Pole #729566E. Pole collected with the assistance of SCE, under the supervision of the IT. Pole included top cross arm with north, center and south phase insulators attached. Included was the lower cross arm with north and south phase fuses attached. Lower cross arm was not securely attached to pole at beginning of incident. Lower cross arm was securely attached to the pole by SCE prior to removal of top portion of pole, for safety reasons. Insulators and fuses were secured by tape and bubble wrap prior to being transported. Collected by MILLER.

Item #18 - (E-18) North phase copper wire, spanning from Pole #729566E to #729565E. Wire was lowered by SCE under the supervision of the IT, and collected by MILLER. Wire was marked by SCE with one wrap of red tape.

Item #19 - (E-19) Center phase insulator from Pole #729565E. Also, included raptor guard, and cut portion of E-1, still attached to insulator. Insulator was removed by SCE under supervision of IT. Collected by MILLER. Insulator was marked by SCE with one wrap of white tape.

Item #20 - (E-20) South phase copper wire, spanning from Pole #729566E to #729565E. Wire was lowered by SCE under the supervision of the IT, and collected by MILLER. Wire was marked by SCE with one wrap of blue tape.

Item #21 - (E-21) North span fuse from Pole #729567E. Fuse was located on the ground under pole. The fuse appeared to be blown. Fuse was collected by Edison, under the supervision of the IT. Fuse was marked by Edison with one wrap of red tape. Fuse was collected by MILLER, logged, and released back to SCE MCCOLLUM.
Item #22 - (E-22) Center span fuse from Pole #729567E. Fuse was in the power fuse unit, in the open position. Fuse was collected by SCE, under the supervision of the IT. Fuse was marked by SCE with one wrap of white tape. Fuse appeared to be blown upon inspection. Fuse was collected by MILLER, logged, and released back to SCE MCCOLLUM.

Item #23 - (E-23) South span fuse from Pole #729567E. Fuse was in the power fuse unit on the pole, in the closed position. Fuse was collected by Edison, under the supervision of the IT. Fuse was marked by Edison with one wrap of blue tape. Fuse appeared to be intact upon inspection. Fuse was collected by MILLER, logged, and released back to SCE MCCOLLUM.

Item #24 - (E-24) North phase copper wire, spanning from Pole #729566E to #729567E. Wire was lowered by SCE under the supervision of the IT. Wire was marked by SCE with two wraps of red tape. Wire was collected by MILLER, logged, and released to SCE MCCOLLUM.

Item #25 - (E-25) Center phase ACSR wire, spanning from Pole #729566E to #729567E. Wire was lowered by SCE under the supervision of the IT. Wire was marked by SCE with two wraps of white tape. Wire was collected by MILLER, logged, and released to SCE MCCOLLUM.

Item #26 - (E-26) South phase copper wire, spanning from Pole #729566E to #729567E. Wire was lowered by SCE under the supervision of the IT. Wire was marked by SCE with two wraps of blue tape. Wire was collected by MILLER, logged, and released to SCE MCCOLLUM.
PHOTOGRAPHS and VIDEOS (Civilians)

TAYLOR Photos and Video (see attachment #6)
Photographs taken by TAYLOR on Monday, December 4, 2017
Video taken by TAYLOR on Friday, December 8, 2017

SCHMIDT Video (see attachment #7)
Photographs taken by Kevin SCHMIDT on Monday, December 4, 2017

BROCK Photos (see attachment #8)
Photographs taken by Earl BROCK on Monday, December 4, 2017

WITNESS STATEMENTS & INTERVIEWS

TAYLOR Audio Interview (see attachment #6)

SCHMIDT Written Witness Statement LE-78 and Audio (see attachment #7)

BROCK Written Witness Statement LE-78 (see attachment #8)

MAMLOCK Written Witness Statement LE-78 and Audio (see attachment #9)

Audio Interviews with LANSKY, DEDERICK, and HAYWARD (see attachment #10)

PHOTOGRAPHS and VIDEOS (Investigation Team)

BERGH Photos (see attachment #49 & #50)

P-JB-001 thru P-JB-086 Photographs taken on Tuesday, December 5, 2017
P-JB-087 thru P-JB-173 Photographs taken on Wednesday, December 6, 2017
P-JB-174 thru P-JB-413 Photographs taken on Thursday, December 7, 2017
P-JB-414 thru P-JB-550 Photographs taken on Friday, December 8, 2017
P-JB-551 thru P-JB-579 Photographs taken on Friday, December 15, 2017

All additional IT recordings associated with the KOENIGSTEIN fire investigation (see attachment #48).
6 - CONDITIONS:

The origin of the KOENIGSTEIN fire was located at Santa Paula, CA 93060. The origin was on a southwest aspect, adjacent to a private driveway, at Lat/Long: (N 34-26-50.995/W 119-07-04.289). The topography was a moderate downward slope from the residence. The City of Ojai is approximately ten miles away to the west. The vegetation at the origin was annual grasses, and a mixture of native and ornamental shrubs.

Weather information for Monday, December 4, 2017, was obtained from a Remote Automated Weather Station (RAWS) located near the City of Fillmore, in the County of Ventura, CA. The Wiley Ridge RAWS is approximately ten miles north of the KOENIGSTEIN fire origin, at an elevation of 1645 feet. The Wiley Ridge RAWS recorded weather hourly at 7:00 PM and 8:00 PM (see attachment #22). The start time of the KOENIGSTEIN fire was approximately 7:30 PM.

Additionally, a BLM lightning map with no observed activity from November 27, 2017, thru December 4, 2017, was obtained for the areas Ojai and Santa Paula (see attachment #23).

Wiley Ridge RAWS

Date: Monday, December 4, 2017
Time: 7:00 PM
Temperature: 54 degrees Fahrenheit
Dew Point: 3 degrees Fahrenheit
Relative Humidity: 12 percent
Wind Speed: 34 to 54 miles per hour
Wind Direction: From the northeast
Elevation: 1645 feet
Latitude/Longitude 34.371667 / -118.840833
Wiley Ridge RAWS

Date: Monday, December 4, 2017
Time: 8:00 PM
Temperature: 53 degrees Fahrenheit
Dew Point: 2 degrees Fahrenheit
Relative Humidity: 12 percent
Wind Speed: 31 to 51 miles per hour
Wind Direction: From the northeast
Elevation: 1645 feet
Latitude/Longitude: 34.371667 / -118.840833
The equipment associated with the cause of the KOENIGSTEIN fire is owned and operated by SCE. The fire originated closest to Pole #729566E. SCE Pole #729566E was between Pole #729567E and #729565E. When BERGH and MILLER arrived at the fire scene, the center phase was broken away from the center phase insulator on pole #729566E. The line had recoiled and was suspended on multiple rocks and brush throughout the span from Pole #729566E and Pole #729565E. The downed conductor was 6/1 ACSR (Aluminum Conductor Steel Reinforced). The conductor was along the CASTRO 16 Circuit originating from Wakefield substation in Santa Paula, CA (see photographs P-JB-419 & P-JB-420).
8 - PROPERTY:

The origin of the KOENIGSTEIN fire was located on the property identified by the Ventura County Assessor’s Parcel Number (APN) 040-022-0-085. The SOA was on private property located at 12695 Koenigstein Road, Santa Paula, California 93060. The Assessor’s Office lists the property as a 9.85 acre parcel. The property is owned by Danny EVERETT and TAYLOR. The property owner’s address is recorded as [redacted] Santa Paula, CA 93060 (see attachment #24).
9 – NARRATIVE:

On Monday, December 4, 2017, at approximately 7:30 PM, a fire was observed, reported and photographed by TAYLOR in her front yard located at [REDACTED] Santa Paula, CA 93060. The Ventura Fire Communications Center (FCC) dispatched units from Ventura County Fire Department (VCFD) to a reported wildland fire. The fire started under extreme fire weather conditions and was later identified as the KOENIGSTEIN fire. Collectively, the THOMAS fire and the KOENIGSTEIN fire consumed 281,893 acres of mixed wildland and 1343 structures destroyed/damaged. The THOMAS fire stared before the KOENIGSTEIN fire at approximately 6:23 PM. Unfortunately, one civilian fatality and one fire fighter fatality occurred as a result of these two fires. The fires were fully controlled on Wednesday, January 10, 2018 (see attachment #1 thru #4).

On Monday, December 4, 2017, at approximately 8:30 PM, I (BERGH) arrived at the THOMAS fire Incident Command Post (ICP) located at Fire Station 82 in Santa Paula, CA 93060. I contacted my colleague, VCFD Fire Investigator Christine SAQUI. SAQUI was the assigned fire investigator for the THOMAS fire. My role was to provide coverage for Ventura County in the event of additional fires. At 7:30 PM, a fire was reported on Koenigstein Road, approximately 3.5 miles northwest of the THOMAS Incident. With knowledge of the second fire, SAQUI and I traveled north on Highway 150 to establish whether this was a separate incident or related to the THOMAS fire.

Enroute to Koenigstein Road, we observed the heel of the THOMAS fire burning along the mountain slope behind Saint Thomas Aquinas College. We observed a large area of unburned fuel between the two fires, as they had not joined together. After passing the college, the highway transitions to an east-west orientation. We stopped on the westbound lane of Ojai Road (Highway 150) just east of Koenigstein Road along the eastern fire flank. The strong, gusty northeast winds had driven the fire across the two-lane road. The intense fire activity and dense smoke inhibited our attempt to drive up Koenigstein Road to locate the heel of the KOENIGSTEIN fire.
At approximately 12:15 AM, we left the area to a safe location.

On Tuesday, December 5, 2017, I arrived at the Ventura Fairgrounds at approximately 7:00 AM. During the previous night, the THOMAS ICP was relocated to the fairgrounds. I met SAQUI for the morning briefing given by THOMAS Operations Chief Chad COOK. At 9:00 AM, I picked up MILLER at Fire Station 50 in Camarillo. We returned to the ICP and met with SAQUI and VCFD Fire Investigator Marshall HATCH at approximately 9:30 AM.

MILLER and I arrived at the intersection of Koenigstein Road and Highway 150 at approximately 11:30 AM. We traveled northward and uphill along Koenigstein Road. There was minimal fire activity on both sides of the road. We observed several destroyed structures on either side of the road. There were strong, gusty northeast winds. With information from FCC, it was determined the initial 911 call reporting a fire on Koenigstein Road was initiated from a residence at [redacted]. We contacted the resident, TAYLOR, who confirmed she was the initial reporting party. TAYLOR indicated she had left her residence to observe the THOMAS fire, burning to the southeast of her residence. After seeing the THOMAS fire, she returned to her residence to begin preparing to evacuate.

At approximately 7:30 PM, TAYLOR was in her upstairs bedroom when she observed two flashes and heard an explosion. TAYLOR went to her window, and observed sparks falling from the area of a power pole in her front yard. TAYLOR noticed a fire started in her yard almost immediately afterward, prompting TAYLOR to call 911.

An origin and cause (O&C) investigation was initiated in the front yard of TAYLOR'S residence. I began examining the burn area near the power pole. I observed low intensity burning in the vegetation in an area approximately 30 feet southwest of the base of Pole #729566E. From this area, I observed a downed power line extending southwest toward Pole #729565E. The conductor remained attached to the power pole insulator on the cross arm of Pole #729565E.

Closer examination showed the center phase conductor had separated at the insulator on Pole #729566E, and landed in the front yard of the residence. The
conductor was draped across the yard over rocks and bushes with the separated end coiled in a small bush approximately 50 feet southwest of Pole #729566E. The power line consisted of aluminum conductor steel-reinforced (ACSR) wire. The separated end of the conductor revealed beading at the terminal ends of the individual aluminum wires, which is consistent with electrical arc damage. I observed evidence of arc damage, beading, bird caging, and discoloration on multiple segments along the downed conductor. There was a raptor guard covering a small portion of the power line that had separated from the pole, and was located on the ground near the severed conductor.

I photographed the scene, and placed some preliminary flags indicating fire travel. MILLER collected the downed power line and raptor guard as evidence. Due to high winds in the area and continued burning of natural vegetation, a decision was made to collect the center power line and raptor guard for the preservation of evidence. MILLER and I left the scene at approximately 5:55 PM, after being relieved by VCSO Senior Deputy Daniel VANOVER, who remained throughout the night for scene security. Collected evidence was secured in a locked and supervised VCFD investigator vehicle. Evidence was transferred to a locked and secured room at Fire Station 50 in Camarillo, to which only three fire investigators have access. Evidence was locked in an additional locker within the room, to which only I had access.

On Wednesday, December 6, 2017, at approximately 7:30 AM, CHAPIN arrived at 12595 Koenigstein Road to relieve VCSO Sergeant LYNCH of his night time security duties. I contacted CAL FIRE Assistant Chief Eric WATKINS, who was coordinating the investigation. It was determined MILLER and I would travel to the reported fire start at Koenigstein Road. SAQUI, HATCH, and VCSO Senior Deputy Gregg DELAROSA would travel to investigate the THOMAS fire.

At approximately 9:00 AM, RUSSELL arrived followed by MILLER and I. CHAPIN and RUSSELL were briefed on the previous day's findings and the sequence of events that transpired with relation to the KOENIGSTEIN fire by MILLER and I. Collectively, we decided to establish ourselves as the IT for the
KOENIGSTEIN fire. We continued by evaluating photographs and evidence taken/collection by MILLER and I on Tuesday, December 5, 2017. The IT established a systematic plan on how to proceed with the investigation, including but not limited to, canvassing the area for witnesses, suspects, subjects, processing the scene adhering to the scientific methodology, and collecting data related to the incident.

The IT started by determining/gathering investigation equipment needed to process the scene. We established a General Origin Area (GOA) of approximately 150'X150' in size through witness statements, photographs, evidence, and fire directional indicators. The IT walked the perimeter of the established GOA and entered an area well outside the established GOA destroyed by advancing fire. Colored flags were placed at macro and micro indicators/vectors to indicate the direction of fire travel. We identified fire directional indicators and marked advancing with red flags, lateral with yellow flags, backing with blue flags, and items of interest with green flags. We processed the fire scene and observed fire directional indicators such as, staining, sooting, charring, angle of char, and protection to determine the fires spread (see photographs P-JB-267 thru P-JB-370). We walked in a narrow “S” pattern interpreting indicators narrowing the GOA. We followed the indicators and the definitive “V” pattern back to the heel of the fire. We utilized our indicators to establish an area approximately 10’X10’ in size. The 10’X10’ area in size was determined to be the SOA. The SOA was determined to be the same location MILLER and I determined to be an area of interest and collected a section of power line to preserve evidence on Tuesday, December 5, 2017. We evaluated the SOA and narrowed it down to a 4’X4’ area, we determined to be the Ignition Area (IA). The IT produced a sketch of the IA showing fire movement within the area based on observed fire patterns on micro indicators (see attachment #25).

Within the IA, the IT observed an exterior landscape light with metal slag deposits still attached to the top cover of the lamp. We observed a hole in the top cover of the exterior landscape light. The landscape light in question had not sustained any significant heat associated with the fire, but appeared to have
sustained some type of contact with the center phase wire when it dropped to the
ground. We collected evidence (E-3 thru E-11) on Wednesday, December 6, 2017.
Evidence was photographed prior to collection and green flagged items of interest
were left in place of the evidence collected. The IT contacted Scott BROWN, SCE
representative for the incident, who was located at the ICP. BROWN advised
another SCE representative would contact the IT. Rick MCCOLLUM, SCE
Investigator, contacted the IT to discuss the reason why the IT contacted SCE. The
conversation with MCCOLLUM was audio recorded, but not in its entirety. Later that
evening, an email was sent to the IT by MCCOLLUM in an attempt to memorialize
the conversation (see attachment #14). The IT made a request for the CAL FIRE
LiDAR Team to be at the incident on Thursday, December 7, 2017. RUSSELL
stayed at scene the duration of the night time hours for scene security and resumed
with the IT on Thursday, December 7, 2017.

On Thursday, December 7, 2017, the IT continued the investigation by visually
and physically inspecting the IA. The LiDAR Team arrived at the incident and set up
their equipment to complete their assigned task. The IT began processing the IA by
using a metal detector, followed by the utilization of a magnet in the same area.
The IT got several hits with the metal detector observing several pieces of metal and
low voltage wire. While utilizing a magnet, the IT found one piece of metal later
identified as part of the exterior landscape lights inner spring that holds the light bulb
in place. During our visual and physical inspection of the IA, we found pieces of
molten metal, structural fragments from the exterior landscape light, and broken
pieces of glass from the light bulb. Several pieces of evidence were collected, and
like pieces of evidence were packaged together. The IT collected and tagged
evidence (E-12 thru E-16). Evidence was photographed prior to collection. The
LiDAR Team finished their assignment and were released by the IT. The IT
photographed the red, yellow, blue, and green flags. The IT removed all directional
indicator flags at the KOENIGSTEIN incident. The IT advised SCE the investigation
had reached the stage of needing SCE'S assistance with further evidence collection.
SCE told the IT they would be at the KOENIGSTEIN incident on Friday, December
KOENIGSTEIN December 4, 2017 17CAVNC103338

8, 2017, at approximately 12:00 PM. CAL FIRE Firefighter II Patrick WALKER arrived at the KOENIGSTEIN incident on Thursday, December 7, 2017, for night time scene security. WALKER was relieved by CHAPIN on Friday, December 8, 2017, at approximately 7:30 AM.

On Friday, December 8, 2017, the IT continued the investigation first by requesting TAYLOR to video record as she walked the IT through what she heard, saw and did during the time the KOENIGSTEIN fire started. The request was granted by TAYLOR, and the IT video and audio recorded TAYLOR’S narration of events. Additionally, we asked TAYLOR to recreate her first photograph she took the night of the KOENIGSTEIN fire to the best of her ability from what she believed to be the same location. The distance from TAYLOR’S balcony to Pole #729566E was approximately 170'. We obtained the recreated daytime photograph by TAYLOR after we concluded the interview. At approximately 12:30 PM, SCE arrived at the KOENIGSTEIN incident with their own LiDAR Team and IT. The California Public Utilities Commission (CPUC) arrived at the KOENIGSTEIN fire shortly after SCE. The IT advised CPUC and the SCE Investigation Team not to enter the GOA of the KOENIGSTEIN fire until we were completed with our investigation and collection of evidence.

At approximately 1:00 PM, the IT allowed the SCE Investigation team and CPUC to enter the GOA to conduct their preliminary investigation. The SCE team conducted LiDAR and took photographs of the area and equipment. The IT provided access for SCE to visually inspect and photograph the downed conductor and raptor guard (E-1 and E-2).

At approximately 4:00 PM, I photographed the hardware and cross arms on Pole #729566E while elevated in an SCE bucket (see photos P-JB-423 thru P-JB-456). SCE lineman removed the top of Pole #729566E and lowered it to the ground. The raptor guard from the center insulator was removed revealing the clamped portion of the center phase. SCE and CPUC representative all showed interest to the unknown black material attached to the conductor. Visible on the severed end of the conductor appeared to be black material spiral wrapped. SCE and CPUC
representatives both made comments concerning the foreign object, and that it was not common practice to have any such material relating to what they were seeing on the conductor. The IT collected evidence (E-17 thru E-26) on Thursday, December 8, 2017.

The evidence on Friday, December 8, 2017, was tagged by both SCE and the IT with independent tracking tags and tracking numbers. Evidence (E-21 thru E-26) was transferred to SCE MCCOLLUM, a property receipt and chain of custody was completed by the IT and SCE. Additionally, a property receipt was completed by the IT and TAYLOR for evidence not associated with equipment owned and operated by SCE. The remaining evidence (E-1 thru E-20) was secured and transported in a locked/marked CAL FIRE vehicle escorted by BERGLAND. A chain of custody was completed by the IT team and BERGLAND. All evidence collected on the KOENIGSTEIN fire was transferred to the CAL FIRE evidence locker at Southern Region Headquarters, 1234 East Shaw Avenue, Fresno, CA 93710, on Saturday, December 9, 2017 (see attachment #17 thru #21).

The IT interviewed several witnesses during the course of the investigation of the KOENIGSTEIN fire. Witnesses TAYLOR, SCHMIDT, BROCK, MAMLOCK, are residence who live on Koenigstein Road and were in the area the time the KOENIGSTEIN fire started. The residence gave the IT any/all photos or videos they took of the KOENIGSTEIN fire and the THOMAS fire. The IT obtained written witness statements from SCHMIDT, BROCK, and MAMLOCK. The first piece of fire equipment to arrive at the KOENIGSTEIN fire was VCFD Engine 25 (E25) staffed by Thomas LANSKI, Bill DEDERICK, and Ian HAYWARD.

All witnesses were either audio/video recorded by the IT. The witnesses told the IT the following in summary: TAYLOR told the IT she drove east from her residence to a vantage point to see the THOMAS fire. TAYLOR told the IT she was in her upstairs master bedroom when she heard an "explosion" at approximately 7:30 PM, and the power went out. TAYLOR told the IT she looked outside her bedroom window and saw fire near the base of the power pole adjacent to her driveway. TAYLOR took a photograph of the KOENIGSTEIN fire, packed her kids in the car,
and drove down Koenigstein Road. TAYLOR told the IT there was no fire visible on Koenigstein Road as she traveled downhill toward Highway 150. VCFD E25 was heading up the road so she turned around to show them the location of the fire in front of her residence.

Kenneth MAMLOCK/Kevin SCHMIDT – MAMLOCK told the IT he went outside his residence to view the THOMAS fire with his brother-in-law, SCHMIDT. While looking to the east he heard a "pop" and turned to his left and looked north. MAMLOCK saw "blue sparks" hitting the ground in front of his neighbor's (TAYLOR) house with instant ignition of fire. MAMLOCK saw the fire spread between the property lines with the wind. SCHMIDT was standing next to MAMLOCK and also saw the sparks hitting the ground. SCHMIDT estimated the fire was approximately 15' X 15' when he first saw flames. After calling 911, SCHMIDT filmed a video of the KOENIGSTEIN fire progression at its early stages.

Earl BROCK told the IT he was observing the THOMAS fire from his backyard, and took pictures at approximately 6:45 PM. At approximately 7:30 PM, BROCK heard a "boom" and then the power went out to his residence. BROCK turned to the west in the direction of the sound and saw flames. BROCK climbed on the roof of his motorhome and saw a rapidly increasing fire that was approximately the size of his 2,300 square foot house. BROCK estimated the winds at 50 miles per hour. BROCK photographed the fire from his vantage point on the motorhome.

The fire personnel off E25 from VCFD (LANSKI, DEDERICK, and HAYWARD) told the IT they were advised to cover VCFD Station 20 as it was uncovered due to the THOMAS fire. E25 personnel told the IT independently/collectively while enroute to cover Station 20, they saw flashes of light at the top of Koenigstein Road. After the flashes, they observed an orange glow in the same area. The decision was made to continue past Station 20 to investigate. E25 was dispatched prior to their arrival to what was later identified as the KOENIGSTEIN fire. E25 arrived at 12695 Koenigstein Road and prepositioned the engine facing south and reported the fire as approximately two to three acres. E25 told the IT they did not observe any fire on the east side of Koenigstein Road, or any fire south of La Broche Road.
E25 told to the IT the KOENIGSTEIN fire was a separate incident and not associated with the THOMAS fire.

OPINIONS & CONCLUSIONS:

The following opinions and conclusions were based on supporting documentation, supplemental reports, statements made to investigators, audio/video recordings, CAD reports obtained from dispatch centers, and evidence found while conducting the origin and cause investigation.

There were no railroads or railways in the SOA eliminating railroad equipment as a cause of the subject fire.

Skies were clear with no thunderhead or cloud build-up observed. There was no evidence located within the SOA consistent with lightning strikes or fire resulting from a lightning strike. A lightning detection map was printed and confirmed there was no recent lightning activity in the area. Based upon the weather data, I eliminated a lightning caused fire (see attachment #24).

Spontaneous combustion was excluded as a potential cause. No evidence of mulch or organic material was located within the SOA that had the ability to spontaneously combust.

There are no campgrounds in the area where the SOA is located. The area is not typically used for camping and did not have campfire rings, campsites, piled material typically associated with a campfire, or indications of any campfires near the SOA. The IT eliminated campfire as a potential cause.

Ventura County currently had a burn ban in effect which prohibits debris burning. There were no burn barrels, drums, piles of trash, or signs of burn barrels being used to conduct debris burning located near the SOA. Additionally, we did not observe any of the previously mentioned items during a perimeter search of the area, eliminating debris burning as a potential cause of this fire.

Although, the relative humidity was 12 percent, the temperature was 54 degrees which is too low to support smoking as a cause. During the examination of the fire
no cigarette butts or other smoking materials were located or observed. Based upon the above facts, we eliminated smoking as a potential cause of the fire.

There was no evidence of debris consistent with the use of fireworks located within the SOA, eliminating fireworks as a cause of the subject fire.

During the examination of the SOA, we did observe glass shards from a light bulb, but the fire occurred approximately three hours after sundown. There were no glass bottles or glasses located within the SOA, eliminating refraction as a potential cause.

Three juveniles live at the residence where the SOA was located, but they were packing personal items with their mother (TAYLOR) for potential evacuation orders as a result of the THOMAS fire. There were no toys, forts, or other evidence of children playing near the SOA. Playing with fire is eliminated as a potential cause of this fire.

There were no reports of anyone engaging in recreational shooting activities prior to the fire. Recreational shooting is not allowed in the general area or by the owners of said property. Therefore, we eliminated shooting as a potential cause.

There was no indication of equipment use near the SOA prior to fire personnel arriving to the incident. No signs of grinding, welding or cutting of metal was noted during the course of the investigation. During the investigation, we examined the SOA and saw no motorized equipment in the general vicinity. We did not observe any disturbed soils, or any area where equipment had been used, eliminating equipment as a fire cause.

There was no evidence of items typically associated with an incendiary type fire located within the SOA. Witnesses did not see any persons or vehicles in the origin area in and around the time the fire started. Additionally, the inaccessibility to the location is not consistent with that of a person who commits the crime of arson.

Based upon the above facts and lack of evidence supporting an incendiary caused fire it was eliminated as a potential cause.

The road in the area of the fire is not a highly traveled road. No tracks or signs of earth disturbance from motorcycles, ATV's or other off road vehicles were
present. There was no mention by residence of any vehicles in and or around the property at the time the fire started. The IT eliminated vehicle/ATV as a potential cause of the fire.

My experience and knowledge of conducting fire investigations, includes instances where power lines producing heat/sparks in a receptive fuel bed, has the potential for igniting a low intensity, slow developing incipient fire dependent on wind. Weather conditions and low fuel moistures contributed to the ignition and rapid extension of the KOENIGSTEIN fire. An eye witness (TAYLOR) arrived above the origin area and observed the fire during its initial growth stage.

The facts and circumstances revealed during the course of the investigation indicate the fire was caused by a downed power line arcing in a receptive fuel bed. The separated end of the conductor was on the ground between two power poles. The evidence, in addition to witness statements and fire patterns observed, revealed the power lines owned/operated by SCE contributed to the cause of this fire.

Based on my training, knowledge, experience, observations at the fire scene, consultation with other investigators, and the elimination of other causes through the scientific methodology, the IT determined the fire occurred when an energized conductor separated near an insulator on power pole #729566E causing a separation arc that ejected molten metal particles onto dry vegetation, and the load side of the separated conductor struck the ground. The KOENIGSTEIN fire burned downslope in alignment with the wind threatening the cities of Ventura and Ojai. The general area around the KOENIGSTEIN fire is urban interface surrounded by mixed wildland.

Signature  Date
Jon G. BERGH  11-18-18
Fire/Arson Investigator
Ventura County Fire Department
10 - ATTACHMENTS:

1 - VCFD Incident Detail Report and 911 Audio
2 - CHP CAD and 911 Audio
3 - Sheriff CAD and 911 Audio
4 - NFIRS
5 - DINS
6 - TAYLOR Photos/Video and Audio Recording
7 - SCHMIDT Written Witness Statement and Audio/Video Recording
8 - BROCK Written Witness Statement, Photos and Audio/Video Recording
9 - MAMLOCK Written Witness Statement and Audio Recording
10 - LANSKI, DEDERICK, HAYWARD Audio Recording
11 - VCSO Deputies Scene Security Statements for 12-5-2017
12 - MCCOLLUM Audio Recording and Email
13 - CAL FIRE FFII WALKER Scene Security Statement for 12-7-2017
14 - LiDAR
15 - WATKINS Email Request for Data from SCE
16 - BERGLAND Supplemental Report (LE-71)
17 - Evidence Log (LE-75e)
18 - SCE Property Report (LE-92)
19 - Chain of Custody (LE-76) - SCE MCCOLLUM
20 - TAYLOR Property Report (LE-92)
21 - Chain of Custody (LE-76) - BERGLAND
22 - Local Weather Report (RAWS)
23 - Lightning Data Report
24 - Ventura County Assessor Parcel Number
25 - 4'X4' Ignition Area Sketch
26 - CHAPIN Supplemental Report (LE-71)
27 - ABC 7 News Article 12/12/2017
28 - Koenigstein Maintenance Records, pages 693 – 695
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