Note

(U//FOUO) Terrorist Interest in Using Fire as a Weapon

31 May 2012

Homeland Security
Fire Department
City of New York

Division of Homeland Security and Emergency Services
New York State Intelligence Center

Los Angeles Fire Department
Joint Regional Intelligence Center
Nevada Threat Analysis Center
Colorado Information Analysis Center
Northern California Regional Intelligence Center
**U//FOUO** Terrorist Interest in Using Fire as a Weapon

31 May 2012

(U) Prepared by the DHS Office of Intelligence and Analysis (I&A), Cyber, Infrastructure, and Science Division; the Fire Department of the City of New York (FDNY); the New York State Division of Homeland Security and Emergency Services (DHSES), Office of Fire Prevention and Control; the DHSES Office of Counter Terrorism; the New York State Intelligence Center; the Los Angeles Fire Department; the Los Angeles Joint Regional Intelligence Center; the Nevada Threat Analysis Center; the Colorado Information Analysis Center; and the Northern California Regional Intelligence Center. Coordinated with the I&A Homeland Counterterrorism Division, the I&A State and Local Program Office, and the FBI Counterterrorism Analysis Section.

(U) Scope

(U//FOUO) This Note is intended to provide awareness of terrorist interest in the tactic of intentionally setting fires to cause casualties, economic damage, and resource depletion. It also lists indicators to watch for, as well as protective measures that can be taken. This information is provided to support the activities of fire departments and DHS, and to assist and inform federal, state, local, tribal, and territorial government authorities; first responders; and the private sector on existing or emerging threats to homeland security.
(U) **Key Findings**

(U//FOUO) International terrorist groups and violent extremists have long shown interest in using fire as a weapon due to the low cost and limited technical expertise required, the potential for causing large-scale damage, and the low risk of apprehension. Recent encouragement of use of this tactic by terrorist groups and violent extremists in propaganda materials and extremist Web forums is directed at Western audiences and supports Homeland attacks.

— (U//FOUO) For terrorists, setting fires has several advantages over other methods of attack, including sustainability (duration of fire and long-term effects); the potential for casualties, economic damage, and wide media coverage; and the accompanying psychological effects of fear and terror.

— (U//FOUO) Recent posts to English-language violent extremist Web forums have encouraged individuals in the United States to start wildfires in the Homeland.

— (U//FOUO) The most recent edition of al-Qa’ida in the Arabian Peninsula’s (AQAP’s) English-language *Inspire* magazine provides instructions for and advocates setting fires in the United States to destroy forests and buildings and cause mass casualties, economic damage, and fear.

(U//FOUO) The equipment and materials needed to use fire as a weapon are common and easily obtainable, making preoperational activities difficult to detect and plot disruption and apprehension challenging for law enforcement. A large-scale fire, as we have seen in recent years, also has the potential to strain homeland security and public safety resources during response and recovery efforts.

(U//FOUO) Terrorists intent on using fire as a weapon may choose to target locations in proximity to populated areas or infrastructure to maximum damage and casualties.
(U//FOUO) Ongoing Terrorist Interest in Using Fire as a Weapon

(U//FOUO) For at least a decade, international terrorist groups and associated individuals have expressed interest in using fire as a tactic against the Homeland to cause economic loss, fear, resource depletion, and humanitarian hardship. There is no evidence that international terrorist groups and inspired individuals are responsible for any purposeful destruction of public or private property by setting wildfires in the United States. Using fire as a weapon, however, is inexpensive and requires limited technical expertise, giving it a strong advantage over other methods of attack. Statements advocating this tactic are most often found on violent extremist Web forums and in violent extremist propaganda.

— (U//FOUO) On 6 February 2012, a purported violent extremist posted a message entitled “The Top 100 Targets in the United States” that noted “pyroterrorism is perhaps the greatest threat America has ever faced,” as perpetrators run a low risk of detection. The posting urges “pyroterrorists” to start forest and grass fires randomly to cause economic damage.

— (U//FOUO) On 19 January 2012, a Palestinian violent extremist group posted a declaration of war on “America” on a prominent violent extremist Web forum and espoused setting forest fires as part of that effort. The posting falsely claimed credit for the Washoe Valley, Nevada forest fires of November 2011. As of 26 January, most follow-on thread postings were supportive of such arson attacks.

(U) Inspire Magazine Encourages Terrorist Use of Wildfires

(U//FOUO) The ninth issue of Inspire—AQAP’s English-language magazine published on 2 May 2012 as the winter 2012 edition—advocates setting wildfires in the United States to create economic hardship and cause the loss of life of firefighters, the destruction of property and buildings, and general psychological distress. The first issue of Inspire, which AQAP released in summer 2010, also briefly made reference to setting fires as a tactic. We have no indications AQAP or unaffiliated violent extremists are planning to act upon the suggestions contained in Inspire.

— (U//FOUO) The ninth issue includes detailed instructions and illustrations on assembling and using an improvised incendiary device (IID) referred to as an “ember bomb” to cause wildfires, as well as information on several ignition and timing mechanisms. It discusses the combustible characteristics of American pine forests and notes the optimal conditions for setting wildfires are strong winds and timber dryness. While Inspire provides a viable design created from common and easily obtainable materials, it could have a high failure rate when manufactured and utilized by untrained or inexperienced personnel.

(U) Materials for an “ember bomb,” as depicted in Inspire.
— **(U/FOUO)** The ninth issue of *Inspire* also includes a four-page section entitled “The Ruling [sic] of Burning the Forests in the Land of the Kuffar Enemies,” which attempts to provide religious justification and legitimacy for setting fires, even if they cause civilian casualties.

— **(U/FOUO)** Montana and California are mentioned as ideal targets for wildfires; the issue cites destructive fires that occurred in these states in 2000 and 2009, respectively. In the adjacent map, taken from *Inspire*, the southwest is highlighted for its combustible features.

— **(U/FOUO)** In the first issue of *Inspire*, under the heading “O Muslims rise up in defense of your Messenger,” Westerners are encouraged to “[burn] down forests and buildings” as one way to harm the “enemy.”

**(U/FOUO) Weaponizing Fire in Populated Areas**

(U/FOUO) According to FDNY, many residential and commercial buildings have unique characteristics that can be exploited by terrorists, including high occupancy, transient occupants not familiar with building layouts and evacuation procedures, height and limited means of escape, and features of combustibility and smoke travel (see Appendix A). We judge that terrorist knowledge of these characteristics—acquired through preoperational activity or through insiders—could be used to develop an effective terrorist attack strategy. Fire professionals note the use of multiple weapons, disabling of fire protection systems, and deliberate targeting of civilians and first responders represent a unique challenge to the mission of first responders, firefighters, and emergency medical personnel.

— **(U/FOUO)** The ninth issue of *Inspire* lists “areas close to buildings” as an optimal place to position an IID to cause casualties.

— **(U/FOUO)** On 1 January 2012, an individual conducted a series of fire bombings in Queens, New York against an Islamic center, a Hindu temple, a convenience store, and two homes. The individual said he was motivated by personal grievances against people at each of these locations. Although these fire bombings were not linked to terrorism, they serve as an example of how arson is an effective means of carrying out attacks.

— **(U/FOUO)** In 2006, Omar Rehman, who was part of an al-Qa’ida sleeper cell, gained employment at a hotel in England at the behest of al-Qa’ida’s most senior operative in the United Kingdom to research how to disable fire and security systems as part of a larger bomb plot ultimately disrupted by UK officials.
(U//FOUO) Terrorist Use of Arson Overseas

(U//FOUO) Terrorist groups and associated individuals overseas have previously used fire as a terrorist tactic to inflict mass casualties and cause panic and destruction.

— (U) In October 2011, a series of firebombs detonated around train tracks in Berlin, Germany disrupted traffic and impeded an efficient emergency response. A previously unknown terrorist group claimed partial responsibility, citing opposition to Germany's role in the war in Afghanistan.

— (U) In the coordinated attack on Mumbai in November 2008, the attackers used arson as one of many tactics. They set fire to floors of the Hotel Taj as they moved through it, confusing and delaying the pursuing Indian security force commandos.

— (U) In February 2007, 68 people were killed when timed incendiary devices concealed in suitcases were detonated on a train in India in an apparent attempt to sabotage peace talks between India and Pakistan.

(U) Implications

(U//FOUO) We do not have any current intelligence indicating terrorists or violent extremists in the United States are planning to use fire as a weapon as described in Inspire magazine and online violent extremist forums. However, because terrorists have long shown interest in this tactic, which is inexpensive, low risk, and requires little technical knowledge, we encourage first responders to remain vigilant to indicators of the potential use of fire as a weapon (see Appendix B).

(U//FOUO) First responders and private sector security officials in large metropolitan areas should be sensitive to the risks posed by adjacent forested areas for fire initiation and propagation into the city or other critical infrastructure. We judge that individuals seeking to use fire as a weapon might consider such forests or wooded areas as prime targets for starting fires aimed at achieving maximum destruction and casualties.

(U//FOUO) Because terrorists can use fire (in the form of an IID) in combination with firearms, mitigating this complex threat will require pre-planning and a coordinated fire service and law enforcement response.

— (U//FOUO) In addition to thermal burns and the blinding effects of smoke, fire from an IID can produce gases that cause a number of physiological effects that can hamper evacuation and complicate the life-saving mission of first responders. Burning materials produce carbon monoxide which, when inhaled at certain levels, can cause confusion, disorientation, and panic. Hydrogen cyanide, a toxic gas and by-product of the combustion of building materials and furnishings, may also be present.
(U) Appendix A: Protective Measures Against Intentionally Set Fires

(U) Protective Measures

(U//FOUO) The following protective measures, provided by FDNY and the DHSES Office of Fire Prevention and Control, are intended to help other fire departments, law enforcement, and emergency response officials minimize vulnerabilities and prepare personnel and infrastructure for the possibility of an intentionally set fire, as well as promote awareness of the threat.

(U//FOUO) Protective measures for wildfires generally focus on property protection, whereas protective measures for buildings focus on saving lives. Because of this distinction, we address the protective measures relevant to the two different target sets separately, and conclude by offering general guidance on protective measures.

(U) Wildfires

— (U//FOUO) Promote public awareness by working with the community to remove combustible fuel and vegetation from around homes and businesses.

— (U//FOUO) Identify critical infrastructure or key resources that may be affected by large-scale, rapidly moving wildfires, and plan for accessibility for firefighting resources and water supply.

— (U//FOUO) Ensure personnel review current standard operating procedures for brush and wildfires, and train for large-scale, advanced fires that are common to arson crimes.

— (U//FOUO) Ensure that the equipment needed to control and extinguish fires is ready and properly maintained (such as off-road vehicles, brush fire pumps, and chain saws).

— (U//FOUO) When possible, increase staff during high-risk periods of low humidity, little or no rainfall, and high winds.

— (U//FOUO) Coordinate law enforcement and park service patrols of high-risk areas, identified as those with residential, business, or critical infrastructure.

— (U//FOUO) Preplan operations and coordinate necessary equipment needs (water shuttles, relay pumping operations, or drafting from natural water resources) for potential incidents where accessibility to water is limited.

— (U//FOUO) Confirm and coordinate the availability of aviation resources for command and control of large-area brush and wildfires.

— (U//FOUO) Confirm the availability of any maps or depictions of park areas as a resource for incident command.

— (U//FOUO) Coordinate and preplan the effective evacuation of residential and business communities as well as scene security and force protection.
(U) **Urban Fires**

— (U//FOUO) Review standard operating procedures and firefighting tactics for search, fire suppression, and evacuation for those occupancies deemed as high-target areas.

— (U//FOUO) Review procedures and train on operations dealing with large-scale, advanced fire situations, as well as the procedures for developing large-caliber firefighting streams, communicating multiple alarms, and coordinating incident command.

— (U//FOUO) Coordinate with emergency medical services and review plans for large-scale triage, treatment and transport of patients, and surge capacity for local medical facilities.

— (U//FOUO) Coordinate with local law enforcement for scene security, force protection, and joint operations.

— (U//FOUO) Identify critical occupancies or infrastructure and review procedures for access, communications, search, and control of fire.

— (U//FOUO) Coordinate with local fire safety and emergency evacuation directors the review, updating, and exercising of any building emergency action plans that provide for sheltering or evacuation of building occupants, with particular emphasis on large life-harboring institutions, areas of public assembly, and institutional, educational, and critical infrastructure.

— (U//FOUO) Review plans and operations for smoke control and ventilation equipment to protect those occupants who might have to shelter in place.

— (U//FOUO) Alert fire and emergency medical units to report any suspected acts of vandalism related to fire-protection systems, devices, or equipment.

— (U//FOUO) Review and conduct drills on processes to create water supply independent of building fire-protection systems or to augment these systems.

(U) **General Guidance**

(U//FOUO) Responding fire departments, law enforcement, and emergency responders should be especially alert to the following factors that can significantly impede mitigation options.

— (U) The use of multiple devices can change fire development and flame spread.

— (U) Multiple devices may be timed to function as booby traps, cutting off targeted populations or emergency responders.

— (U) Intentionally set fires using accelerants may be characterized by unusual fire conditions such as the amount of fire and color of smoke, unlocked doors, signs of forced entry, and evidence of trailers and plants.*†

— (U//FOUO) Fires at critical transportation nodes (bridges, tunnels) will create regional traffic disruptions, which will delay emergency response. Traffic ripple effects will slow interstate commerce (land, air, maritime), possibly causing national disruptions.

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* (U) A trailer refers to material arranged to spread fire from its point of origin to other areas (such as cotton waste, rags, paper, fluids, excelsior, or waste film).
† (U) A plant refers to material arranged to start and feed the initial fire (such as candles, matches, chemicals, or electrical or mechanical material).
(U) Appendix B: Potential Indicators for Setting Fires

(U//FOUO) Many of the activities listed below are constitutionally protected. They should not be reported absent articulable facts and circumstances that support the source agency’s suspicion that the behavior observed is not innocent, but rather reasonably indicative of criminal activity associated with terrorism, including evidence of preoperational planning. Race, ethnicity, national origin, or religious affiliation should not be considered factors that create suspicion.

— (U//FOUO) Acquiring unusual amounts of precursor materials used to start large fires (such as foam, clocks or timers, batteries and wires, or sulfuric acid).

— (U//FOUO) Displaying unusually nervous or suspicious behavior while providing evasive or vague responses to questions about intended use of the products.

— (U//FOUO) Conducting unusual research or eliciting information related to weather, dry seasons, winds, or types of forests and vegetation.

— (U//FOUO) Appearing to conduct reconnaissance in remote, wooded areas, especially at night.

— (U//FOUO) Asking about emergency-response capabilities and procedures or fire department locations, or calling in false alarms to observe response.

— (U//FOUO) Conducting Internet research related to possible target selection, material acquisition, or historical cases of arson.

— (U//FOUO) Conducting “practice runs” to test incendiary devices.

(U//FOUO) Preoperational activities of violent extremists in the Homeland might be difficult to detect. Agencies with local or state oversight should monitor events that might be linked to a larger terrorist operation. Suspicious activities should be reported and shared immediately.
(U) Reporting Notice:

(U) DHS and the FBI encourage recipients of this document to report information concerning suspicious or criminal activity to the nearest State and Major Urban Area Fusion Center and to the local FBI Joint Terrorism Task Force. State and Major Urban Area Fusion Center contact information can be found online at http://www.dhs.gov/contact-fusion-centers. The FBI regional telephone numbers can be found online at http://www.fbi.gov/contact/fo/fo.htm and the DHS National Operations Center (NOC) can be reached by telephone at 202-282-9685 or by e-mail at NOC.Fusion@dsa.dhs. For information affecting the private sector and critical infrastructure, contact the National Infrastructure Coordinating Center (NICC), a sub-element of the NOC. The NICC can be reached by telephone at 202-282-9201 or by e-mail at NICC@dhs.gov. When available, each report submitted should include the date, time, location, type of activity, number of people and type of equipment used for the activity, the name of the submitting company or organization, and a designated point of contact.

(U) I&A would like to invite you to participate in a brief customer feedback survey regarding this product. Your feedback is extremely important to our efforts to improve the quality and impact of our products on your mission. Please click below to access the form and then follow a few simple steps to complete and submit your response. Thank you.

[Survey]

(U) Tracked by: HSEC 8.3.1, HSEC 8.4.4, HSEC 8.5.2, HSEC 8.5.3.6, HSEC 8.6.2.8, HSEC 8.6.3, HSEC 8.8.1
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   - Shared contents with state and local partners
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   - Other (please specify)

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   - Critical
   - Very important
   - Somewhat important
   - Not important
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