Netherlands Wild Fire Investigation Recommendations

As a result of the course Wildfire Origin & Cause Determination
In the Netherland held at
Harskamp, Gelderland
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Netherlands Fire Investigation Recommendations

Introduction
Pursuant to our recent undertaking in providing wildfire investigation training to members of the Dutch Fire and Police Services, we were asked to identify relevant issues and make recommendations based on our professional experience.

First, let us start by acknowledging the combined efforts of your emergency services to work cooperatively; the foresight to recognize the main issue in its early stages; and the taking of proactive measures to remedy what may become much more significant problems in the near future if left unaddressed.

The following matters are offered for your consideration.

2. Scene Protection and Evidence Preservation

Issue:
Based on discussions with investigation personnel and our brief personal observations, fire suppression techniques do not emphasize protection of the origin and in fact, tend to completely obliterate both fire vector indicators and cause-related evidence that may be present in the origin area. This is not intended as a criticism, but only as an observation. The reason for this, in our opinion, is a long-standing lack of emphasis on scene protection by fire suppression supervisors/managers. If the origin is not protected, there will be little, if any chance of determining the origin, let alone the cause. Delivering fire investigation training will accomplish nothing without an undisturbed fire origin. We believe that this is the largest challenge you face regarding the accurate determination of fire cause.

Recommendation:
The positive news is that this is not a problem limited to the Netherlands. This issue was a significant concern in both America and Australia, up until recently. To remedy this situation, the National Wildfire Coordinating Group, (NWCG), developed a 4-6 hour training course, (FI-110), that can, with little effort, be delivered to fire suppression first responders. The course trains suppression personnel in how to identify and protect the fire’s general origin area, locate and secure critical physical evidence and identify potential witnesses. This course material was provided to the attendees of the recent FI-210 class.

It is our strongest recommendation that plans be put in place to deliver this to all fire suppression first responders and supervisors as soon as is possible.

We believe that this is your highest priority.
3. Basic Origin and Cause Determination Training Courses

**Issue:**
Fire investigators (both police and fire service) are extensively trained in structure fire investigation; however, there are significant differences between that and wildfire investigation. This lack of training effectively cripples any investigation efforts.

**Recommendation:**
To achieve accurate cause determination, all investigators should receive proper training in the appropriate methodology. The recent decision to host an FI-210 Wildfire Origin and Cause Determination Training pilot course in the Netherlands is an exemplary first step, but still falls short of addressing the full issue. To be effective, all personnel with wildfire investigation responsibilities must be trained to this level. The course also should meet NWCG standards in that both the main classroom subjects and the live-fire practical exercises must be delivered. (To deliver this course without the practical exercises is essentially useless, so careful planning to ensure that an appropriate location and time of year conducive to this is selected.)

Of course, we stand ready to provide the training, (and will continue to return to your wonderful country as often as you invite us); however, our recommendation is that you need to immediately begin laying the groundwork to become “self-sufficient” in delivering this training. To accomplish this goal, we would suggest that you identify three or four of your most experienced investigators and make arrangements for them to attend as many wildfires as possible; (see Issue/recommendation #). Additionally, these personnel should shadow the next two or three courses as trainee instructors. (This is of course assuming that you can arrange for us to deliver two or three more courses over the next several years.)

While we would love to continue to be the main source of your wildfire investigation training for the indefinite future, we believe that you will be both ready to and be better served to take this role on yourselves within the next three-to-five years.
4. Advanced Serial Arson Investigation and Management Training Courses

Issue:
A significant number of your wildfires potentially appear to be the result of long-term serial arson. The fires in Schoorl and Hoog Soeren appear to be examples of this problem, (although there is no concrete evidence of the actual causes of these fires). Simply determining the origin and cause of fires in a serial arson case is not enough to resolve the problem. An appropriate strategic plan must be developed and implemented by trained and qualified personnel. At the present, you have personnel with the generalized skill sets, but not those specific to wildland arson.

Recommendation:
These cases can be very complex, time-consuming and require not only sufficient resources, but also personnel with highly specialized skills in managing task force operations, conducting behavioural evidence analysis and formulating and implementing appropriate strategic and tactical measures. These skills are not addressed in FI-210 but are covered in depth in the NWCG course, FI-310. It is our recommendation that you begin by sending at least two of your investigators, (one fire, one police), to the upcoming FI-310 course in Melbourne, Australia in July, 2012. While there will be FI-310 courses offered in the United States prior to this date, we believe that the modified Australian version will be a much better match for your situation.

The two persons designated to attend this course would also be tasked with evaluating its potential for being offered in the Netherlands in the near future.
5. Accurate Determination of Wildfire Cause Issue;

It is critical that the Netherlands Fire Service (being the responsible agency for the prevention, management and suppression of wildfire) accurately identify the origin and cause of wildfires it attends. This has a number of valuable outcomes namely;

- By accurately determining fire cause, ‘accidental’ fire cause issues can be more appropriately addressed, e.g., should a spate of machinery caused fires be identified in an area, a prevention campaign can be targeted to address this fire cause, thus reducing the incidence of further fires;
- The early identification of an arson series will allow for fire investigation team to prioritise investigative efforts, allowing for a greater opportunity to identify the arsonist and subsequently prosecute the person/s responsible;
- Allows for the early formation of task forces to investigate fires pro-actively. This will assist in resourcing of investigation teams and the subsequent justification of additional resource allocation to these teams.

Recommendation;

That through a proactive approach to investigation of wildfires, the Fire and Police Service’s formulate a set of rationale to identify fires requiring formal origin and cause investigations to be completed.
6. Police/Fire Service Investigation Co-operation

Issue;
Overseas experience has shown that it is critical for the two key agencies (Fire and Police Service) responsible for investigating wildfire arson, work very closely together. Given the complex issues that arise in the wildfire investigation process, it has been found that by working in isolation, there is a greater risk of incomplete investigations and subsequent loss/oversight of critical information and evidence that could convict those responsible.

By working closely in a team approach to investigations, there is a greater success of identifying those responsible and prosecuting them. This is achieved through the sharing of skills of Fire Service Investigators (having a thorough understanding of fire behaviour, ignition causes and factors, and access to fire service records and personnel) and Police Investigators (thorough understanding of legal process, interviewing techniques and having powers of search and entry).
This co-operative approach was very clearly demonstrated during the FI 210 Class held at Harskamp in May 2011. Working in groups, students were assigned to syndicate groups based on their respective Fire and Police backgrounds. During the course, it was confirmed how successfully this combined skills mix can be used to investigate fire cause and origin.

Recommendation;
It is considered appropriate based on a nationally standardised model, Fire and Police Investigators form a close alliance based around their geographical areas of responsibility. During the summer period, this could form part of a dedicated ‘seasonal’ response team to attend fires to investigate their cause, conduct enquiries into parties responsible and to compile evidence briefs. Ideally they would be co-located in a Police or Fire Service Facility, appropriately resourced and staffed to operate with access to both agency’s data management systems. This arrangement should be governed through formal agreement (e.g., a Memorandum of Understanding) between the Police and Fire Service’s outlining who is responsible for costs, and identifying roles and responsibilities of investigators from each agency.
Furthermore, the formation of a ‘National Wildfire Investigation Response Team’ made up of leading Police and Fire Service Investigators should also be considered, to respond to serious fire events and to work with local investigators. Additionally, if considered appropriate, they should also have the ability to manage serious investigations beyond the capacity of local investigators.
Additionally, the establishment of a National accreditation register of authorised Wildfire Investigators should be considered with acknowledged pre-requisite qualifications (FI210) and appropriate experience benchmarking those accepted on the register.
Finally, a key officer from each Service (Fire & Police) should be identified as an officer responsible at a senior level to address any interagency issues that may arise at a local level requiring resolution. This may however be identified in a ‘National Wildfire
Investigation Plan’ or similar document jointly formulated by each Service to govern procedure of Wildfire Investigations in the Netherlands.
7. Funding Issue.
The investigation of wildfire cause is a methodical process that, if conducted appropriately, takes time to develop and undertake. This obviously has an impact on staff time and resourcing.
It is considered essential that sufficient funding be identified to allow for the undertaking of what may evolve into lengthy and complex investigation processes over weeks, months or even years. Additionally, there is a need to adequately equip fire investigators with specialist equipment to undertake origin and cause investigations, provide salary for overtime to cover serial investigation cases and to engage specialists to support investigations in providing supporting reports.
Each service investigator needs to have access to this equipment which should include but not be limited to;

- Digital SLR camera and lens’s;
- Digital rangefinder to estimate distance;
- Tape-measures, inclinometers, weather meters, flags;
- Handheld GPS Units etc..

Additionally, during serial arson investigations, operational costs will be encountered such as the hiring of specialist equipment (e.g., aircraft) to conduct surveillance of serial arson ‘hot spots’. Therefore, appropriate operational budgets need to be identified by each agency in this area. In adopting a co-ordinated approach to investigations, agreement could possibly be reached to share costs in this area. However, these costs could be offset through a ‘Cost Recovery’ program based on negligent caused fires. This model is successfully adopted overseas and allows for the recouping of funds to cover the cost of suppression by fire services and could also include a calculation for investigation costs.

Recommendation;
That each agency (Police and Fire) identify budgetary requirements to allow wildfire investigations to be undertaken based on a National/Regional approach. Ideally this could be based on a ‘cost-sharing’ arrangement across each agency.

8. Standards for Upward Reporting of Investigations Issue;
There is a need to establish a standardised approach to reporting of Wildfire Investigations. Experience has shown that it is vital to have a uniformed approach to investigation reporting across Police and Fire Agency investigators to prevent any ambiguity that may result during the presentation of evidence in court of a wildfire investigation case, gives consistency in terminology and allows for accurate recording and reporting of fire statistics.

Recommendation;
That the ‘National Wildfire Arson Prevention Committee’ (see recommendation 9) be charged with the responsibility of developing a standard field wildfire investigation reporting doctrine to encompass Joint Standard Operating Procedures, Reporting Forms and an agreement on statistics collation pertaining to wildfire investigations undertaken between both agencies.


It is seen as critical to have at a National level in the Netherlands, a Committee of Senior Fire / Police Service Executive Officers and a representative group of key Wildfire Investigators from both Fire and Police Services. Overseas experience has shown that there is a need for a ‘top down’ support and co-ordination approach to Wildfire Investigation at a National and State Level.

Recommendation;

To establish a National Wildfire Arson Prevention Committee to be responsible to ensure a consistent approach for standards development, reporting and the like across both Agency’s.
This will provide;

- Support for prevention and investigation initiatives through funding, staffing and Service Policy formulation;
- An avenue for Agency’s to address the wildfire arson problem at a national level;
- Co-ordination of national prevention campaigns addressing wildfire cause prevention. This may include a ‘National Wildfire Prevention Week’ during which both agencies can be engaged across the nation to promote arson prevention (e.g., a Crimestoppers Campaign to provide information about suspected arsonists);
- National co-ordination of reporting of arson, response to wildfire investigations and adoption of prevention models to address wildfire arson;
- A single point of contact for Government to deal with the wildfire arson problem. (Is being accomplished in the idea of the national front desk for Wildfire (Alette Getz))

It is therefore suggested that a ‘National Wildfire Arson Prevention Committee’ be established to co-ordinate, formulate and address a national approach to wildfire arson prevention and investigation.

Further, consideration in adopting a ‘Cost Recovery’ model to re-coup operational expenses from property owners, corporations and government agencies, found to be responsible for fires in accidental or negligent circumstances, as a possible income source. These recovered costs to be shared between Police and Fire Service Fire Investigation Units.

10. Firefighter Arson Prevention
**Issue:**
Based on limited research in both the U.S. and Australia, firefighter arson is a significant concern. Studies and anecdotal evidence suggests that from 30 to 60% of all arson fires within some jurisdictions may be the result of fire-setting firefighters. At present, you do not have a sense of how many of your fires are the result of deliberate fire-lighting, let alone those set by firefighters.

**Recommendations:**
Specialized training to recognize and investigate firefighter arson is critical, (FI-310). Perhaps even more important is preventing it before it happens, as even a single fire set by a firefighter is intolerable. This issue has been successfully addressed in both the U.S. and Australia, through internal training and awareness programs. We can provide additional specifics. We would strongly recommend that you obtain these specifics and begin taking steps to implement these preventative measures as soon as possible.

**11. European Union Cooperation and Networking**
**Issue:**
Based on our limited knowledge of the Northern European situation, the Netherlands appears to be grappling with very similar issues as other European Union member countries regarding wildfire investigation and prevention.

**Recommendation:**
Shared problems suggest a shared solution. Rather than approaching these issues separately, there may be some value to approaching it as a whole. Sharing of information and knowledge; pooling of resources; and economic efficiencies suggest that this may be a better approach than each country approaching it individually.
The recently established initiative, the European Project on the Investigation of Wildfires, Forest Fires and Outdoor Fires, (EPIWOF) started by the UK is a strong step in the right direction. We would recommend that you continue to maintain an active role in this project and seek other opportunities to network and build cooperative relationships with the emergency services across Europe.

Finally, we wish to acknowledge the pro-active initiative taken by the Netherlands Fire and Police Service’s in addressing the issue of wildfire investigation and to reduce the incidence of wildfire arson in your Country. We wish to particularly acknowledge the efforts of Winand Sitsen of the Netherlands Police and Henri Zeevalkink of the Netherlands Fire Service in taking the initiative to embark on this new training initiative within Northern Europe, which we are confident will reduce the incidence of deliberately lit fires across the Netherlands and identify those responsible.

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