



**HAMPSHIRE
FIRE AND
RESCUE
AUTHORITY**

Purpose: Noted

Date: **25 September 2019**

Title: **PRESENTATION - OCADO FIRE FEBRUARY 2019**

Report of Chief Fire Officer

SUMMARY

1. At the beginning of February 2019 HFRS responded to a commercial industrial fire at the Ocado Customer Fulfilment Centre (CFC), Walworth Industrial Estate Andover. The building was a warehouse used to store food and other supermarket goods prior to delivery.
2. Processes inside the building were highly automated with over 1000 robots picking customer shopping ordered online. At the time the building was commissioned in 2015, the technology used was unique within the UK.
3. As this was the first fire in UK involving a building of this nature, Hampshire Fire and Rescue Service (HFRS) commissioned a review of the incident to examine the performance of both HFRS as responders and occupancy (Ocado plc) in respect of the fire in order to feed into local integrated risk planning and also more broadly into Sector learning on fighting industrial fires in buildings with automated installations, a technology that has not been commonplace across FRS localities.
4. The review process has identified significant findings that were contributory factors in fire development, which were reported to HFRA in July 2019, operational learning has been fed back into the Service and into the Sector using National Operational Learning mechanisms as well as the Emergency Services Show 2019.

BACKGROUND

5. Due to the scale and significance of the fire and major incidents that took place at the Ocado Customer Fulfilment Centre in Andover in early February 2019, a team was established to lead a review into the causes and development of the incident for the benefit of local risk planning, organisational and Fire Sector learning. This review was commissioned by the Hampshire Fire and Rescue Authority with funding of £164,000 approved to resource the review.
6. The objectives of the review were set by the CFO and focussed on areas of learning for HFRS and its local multi-agency partners, the actions of Ocado Group, the operational, tactical and strategic learning relevant to Fire and Rescue more broadly and a technical assessment of the building construction and the causes of fire and its growth.

OCADO'S ACTIONS

7. Within the scope of the review, the history of the building, fire engineering, fire risk assessments and interaction with planning authorities was fully analysed as well as the specific actions of Ocado on the night of 5 February 2019.
8. As detailed in the report of 17 July to HFRA, the review concluded that Ocado plc's actions (specifically the delay from the detection of the fire to the fire call being made and subsequent action to switch off the sprinkler system) were contributory factors in fire growth and development.
9. The Service have engaged with Ocado plc consistently and productively to exchange information and deepen our knowledge to assist with the review, for example gaining CCTV footage and sprinkler output information
10. Where a fire in an industrial building with the specific automated technology as used by Ocado plc was unprecedented within the UK, there is a strong desire from all quarters including Ocado plc to prevent such a reoccurrence. This may result in further research and development into systems that will better prevent and detect any fire.

HFRS AND PARTNERS' ACTIONS

11. As the Ocado fire necessitated a broader response due to the duration, intensity and potential risk associated with hazardous material, over the course of the 4 days a major incident was declared twice.
12. This triggered the involvement of the Hampshire and Isle of Wight Local Resilience Forum (HIOWLRF) emergency response arrangements. In addition, outside of LRF arrangements specific technical support was given by several Fire and Rescue Services.
13. Such multiagency cooperation was necessary and instrumental in reducing immediate risk to the local business and residential community and assisting a return to normality as soon as possible. This cooperation is routinely planned, prepared and exercised as part of the LRF arrangements and has been fully debriefed.
14. From the point of first interaction with the site in a business fire safety capacity, HFRS has had knowledge of the building and risks contained within.
15. From the point of first mobilisation to the site on Tuesday 5 February HFRS conducted all its operational tactics in line with established procedure. Evidential material (CCTV footage, Body Worn Video footage, radio logs) demonstrate that HFRS utilised all the tactics and procedures that personnel have been trained in.
16. In addition, every firefighting media that HFRS routinely deploys, including Compression Air Foam System (CAFS), Ultra-high-pressure lance (UHPL), water jets, and Positive Pressure Ventilation (PPV) was used, as well as considerations for bulk CO₂, Hi-Ex foam and use of High-Volume

Pumps. And yet despite the largest concerted effort of HFRS in recent years to minimise the impact with the presence of several hundred firefighters and support staff over the four days, the building was deemed a total loss.

SECTOR LEARNING

17. Risk critical learning has been identified throughout the course of the review and immediately acted on both within the Service and where relevant shared more broadly using the National Operational Learning (Fire) model. Furthermore, the learning will be showcased at the Emergency Services Show (ESS) during September 2019.
18. Learning pertinent to HFRS in terms of policy and practice has been continually identified and fed back through the established mechanism of output reports to capture learning at the point of discovery and quality assure it before feeding back into the Service.

TECHNICAL ASSESSMENT OF FIRE DEVELOPMENT

19. To meet this objective, Building Research Establishment (BRE) were tasked under the contract by the Ministry of Housing, Communities and Local Government to report on the building in relation to the fire.
20. In addition, the fire engineering skill set within the Service allowed a Service-view of the building's behaviour and allowed the review team to use that knowledge from the outset of the review to inform analysis.

SUPPORTING OUR SERVICE PLAN AND PRIORITIES

21. As a learning organisation the Service will always reflect and examine its performance to assure the communities it serves that policy and practice are of the highest quality. This links directly to all the priorities within the Service Plan and our overall purpose of making life safer so that Hampshire is a place where communities, business and the economy will thrive.
22. The work of the Ocado Review has fed directly into National Operational Learning and the NFCC so that the wider sector can benefit from Hampshire learning at this atypical incident. This links directly to our duties under the Fire and Rescue National Framework.

COLLABORATION

23. Throughout the course of this review, HFRS staff have collaborated with a wide group of stakeholders within the fire sector and beyond. The collaboration with stakeholder groups has enabled the review to have access to a wider range of source material and expert opinion as well as exchange information which has aided a deeper understanding of the events of 5–8 February 2019.
24. Stakeholders included (but were not limited to), the National Fire Chiefs Council Business Fire Safety and Sprinkler leads and working groups,

National Operational Guidance and Learning (NOG, NOL), Ocado plc and Building Research Establishment (BRE).

RESOURCE IMPLICATIONS

25. There are no additional resource implications associated with this report outside of the funding that HFRA approved in February 2019 to fund a temporary Review team for six months.
26. To fully embed the learning from the review of the Ocado fire will consume management resource which will not exceed normal management resource time.

ENVIRONMENTAL AND SUSTAINABILITY IMPACT ASSESSMENT

27. There are no negative impacts for environment or sustainability identified within this report.

LEGAL IMPLICATIONS

28. The Fire & Rescue Framework for England places high level expectations on Fire and Rescue Authorities to promote public safety.
29. Specifically, the framework places a requirement to share details to improve the evidence base of what works best. Within this context sharing the knowledge of how the fire was fought and the actions of HFRS as well as Local Resilience Forum partners during the period 5–8 February can be viewed as legislative compliance by the authority.

EQUALITY IMPACT ASSESSMENT

30. The proposals in this report are considered compatible with the provisions of equality and human rights legislation.

OPTIONS

31. This report provides HFRA with assurance that the decisions and actions of HFRS and its partners during the period 5–8 February were responsible and well informed given the dynamic operational situation. Furthermore, with the analysis undertaken by the Review team in conjunction with subject matter experts, the combined actions of HFRS, other FRS and LRF partners could not have resulted in any other circumstance that the total loss of the Ocado CFC site.
32. Considering the analysis undertaken by the review team it is difficult to envisage how this loss could have been prevented. This report provides a mechanism for HFRA to make an informed, continued endorsement of HFRS actions during the period 5–8 February and all preceding and consequent activity undertaken by HFRS on the Ocado CFC site, Walworth Industrial Estate, Andover.

EVALUATION

33. The level of commitment by HFRS to review the events of 5–8 February at Ocado CFC demonstrates the desire of the Service and the wider Fire Sector to extract learning from the most significant of fires. This is vital to enable the Fire Sector to evolve the operational tactics and risk planning it undertakes in response to new and emerging technologies employed in business and industrial premises.
34. This fire received interest from FRS across the UK and beyond and because of this review, HFRS has been able to contribute to FRS collective knowledge.
35. Ocado plc have taken their own learning from the incident and will be researching how systems integrated into their technologies can better prevent and detect fires. This review has demonstrated the continued benefit of HFRS working closely with local businesses of all sizes to assist in their fire risk management.

CONCLUSION

36. This report and presentation gives a full overview of the complex incident that took place from 5–8 February, which HFRS was the lead agency for resolving and was supported by many partners across the LRF, the Fire Sector and by Ocado plc.
37. The findings of the review have demonstrated that given the contributory factors to fire growth and development, despite the array of firefighting media and resource utilised in tackling the fire, the outcome could not have been any different than a total loss of the building.
38. Despite this, the combined efforts of agencies involved enabled local businesses and residents to return to normality as soon as possible. HFRS have continued to work with Ocado plc to help inform their future risk planning and mitigation concerning fire.
39. All learning has been shared in a timely manner internally and across the NFCC to ensure that the fire sector can benefit from the knowledge and experience gained by HFRS in this incident.

RECOMMENDATION

40. That the contents of this report and presentation, be noted by Hampshire Fire and Rescue Authority.

BACKGROUND PAPERS

41. Ocado Fire Contributory Factors– HFRA July 17, 2019

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