



# Northamptonshire Fire and Rescue Service



**CFO Martyn Emberson**





# Aims

- **Outlining our Journey of introducing **Cutting Extinguishing Concept** (COBRA, Thermal imagery and Positive Pressure Ventilation) into the culture of the Fire and Rescue Service**
- **Exploring incidents where this new Cutting Extinguishing Concept has been used**
- **Sharing with you the lessons we have learned on that journey**





# Northamptonshire Fire and Rescue Service

- Northamptonshire:**
- Approx. 2400km<sup>2</sup>
  - 700,000 population
  - Six larger towns 20,000 +
  - Northampton - 210,000
  - 580 Firefighters
  - 22 Fire Stations
  - 8 Full-time
  - 14 Part-time (19 sections)







# Northamptonshire





# Northamptonshire FRS and Cobra

## **i** **2012**

- Pioneering Cobra use in the UK
- Fleet size: **28**
- Standard pumps with Cobra: **15**
- Rapid Response with Cobra: **3**
- Thermal, Camera and PPV on all
- 5 Years of Cobra development
- 2 year EU FF II Project
- CCS Cobra training provider/Academy





# Släckförsök mot husbrand

Test with constructionfire







# NFRS Standard Fire Appliance





# UK Firefighter fatality incidents

## Hertfordshire (2005)

Harrow Court



## Warwickshire (2007)

Atherstone



## Southampton (2010)

Shirley Towers



2004 – 2010: 14 UK Firefighter fatalities as a result of fire behaviour related events





# Northamptonshire FRS Cobra Timeline



## Actions before delivery of first Cobra vehicles:

### 2007

- NFRS near miss
- Project to identify new innovation
- Identification of Cobra equipment
- Research into system and potential capability

### 2008

- Strategic implementation Plan
  - Risk Assessment
  - Standard Operating Procedure
  - Training programme
- Ordered first 3 Cobra frontline appliances





# Northamptonshire FRS Cobra Timeline

## **2009**

- Delivery of first 3 Cobra appliances in January
- Instructor training and operator course development
- Technician and Service training
- Delivery of initial operator training courses
- Delivery of Incident Commander training
- Delivery of 3 additional Cobra fire appliances in September (accelerated vehicle replacement)
- European FireFight II Project

**6 operational Cobra fire appliances by end of 2009**





# Northamptonshire FRS Cobra Timeline



## 2010

- Delivery of additional 3 Cobra appliances
- Delivery of 1 Rapid Response Vehicle
- Development of training facility
- CCS Cobra training provider
- **10 operational Cobra appliances by end of 2010**

## 2011

- Delivery of 3 further Cobra appliances
- Development of Cobra Training Academy and Command Development Centre
- **13 operational Cobra appliances by end of 2011**







# Northamptonshire FRS Cobra Timeline



## 2012

- Development of Tactical Fire Fighting Training Centre
- Development of second generation Cobra Rapid Response vehicles (2 on order)
- Delivery of 3 further Cobra appliances
- Research preparation for EU FF III Project
- **Current Position 16 operational Cobra appliances and 2 further appliances on order**





# Implementation Considerations



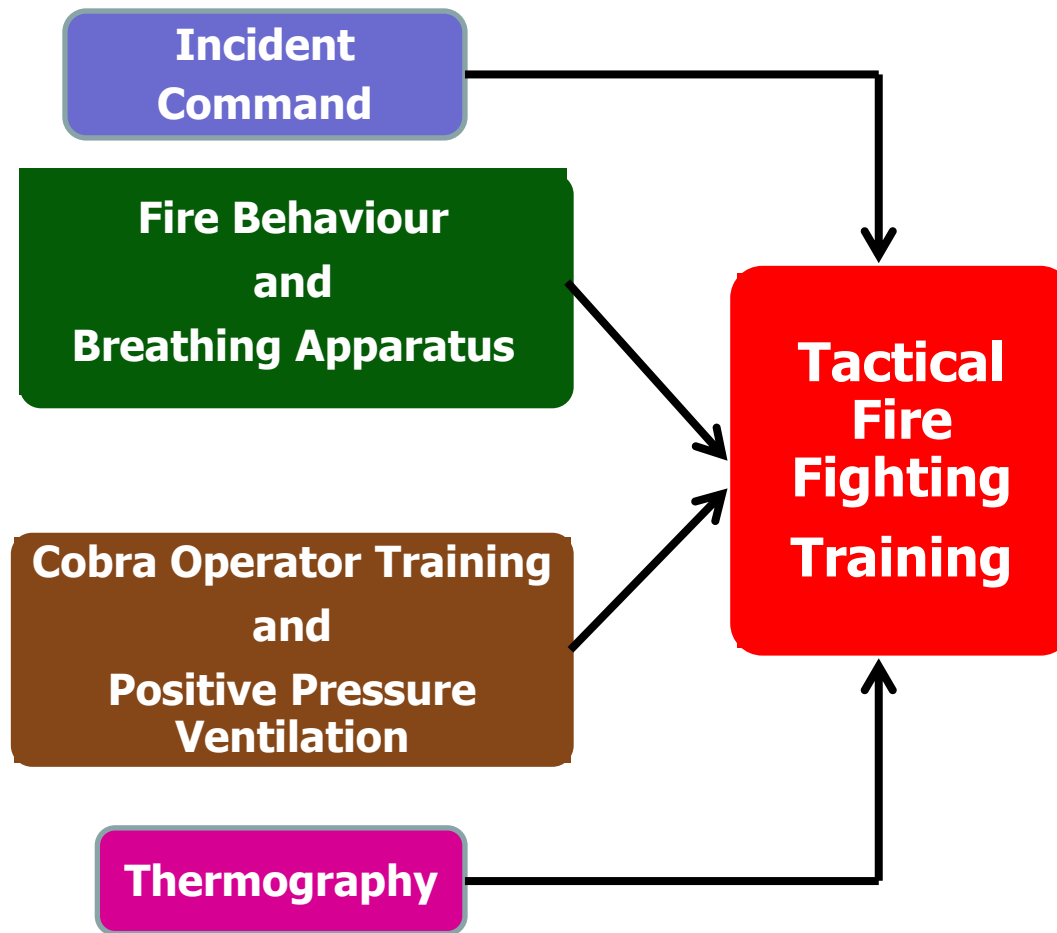
## Implementation into NFRS:

- Clear strategic objective to improve Firefighter safety
- Aim - complete organisational integration
- Critical Mass a key element
- Appropriate, Risk Assessed and Safe System of Work
- Education and training essential **at every level**
- Communication is the key
- Recognition of Culture and resistance to change; embedding as an additional piece of equipment and additional tactic





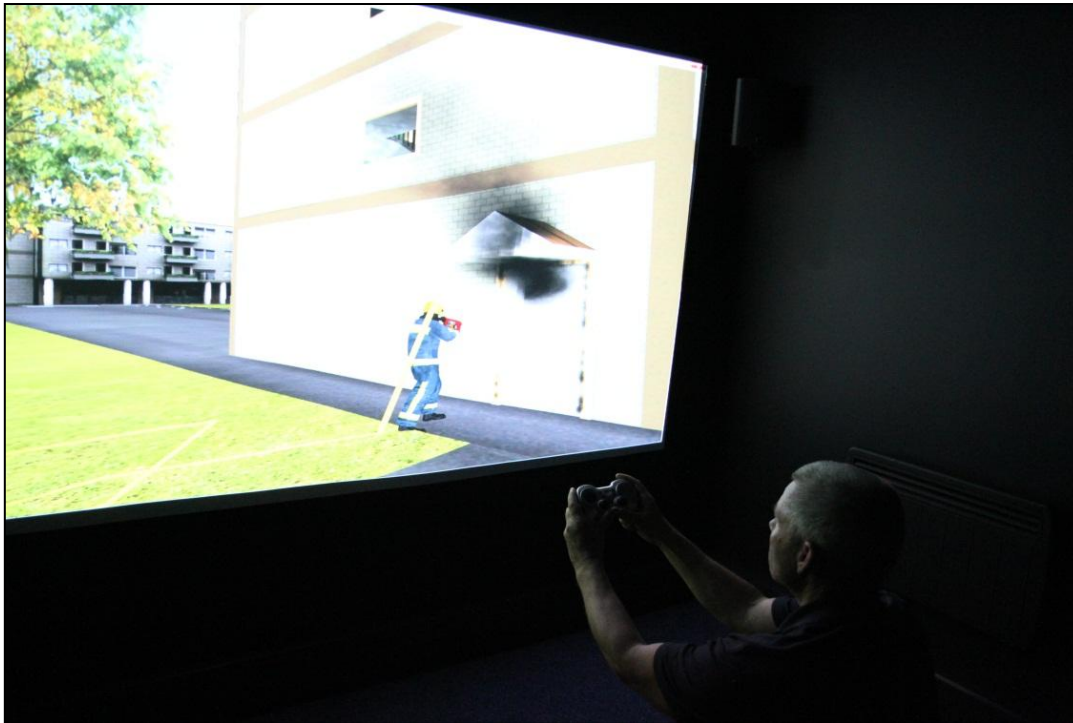
# Progressive Integrated Training Programme







# NFRS Command Development Centre



## **Simulated Incident Command Training**

- Cobra tactics and equipment fully integrated using XVR complete immersion software





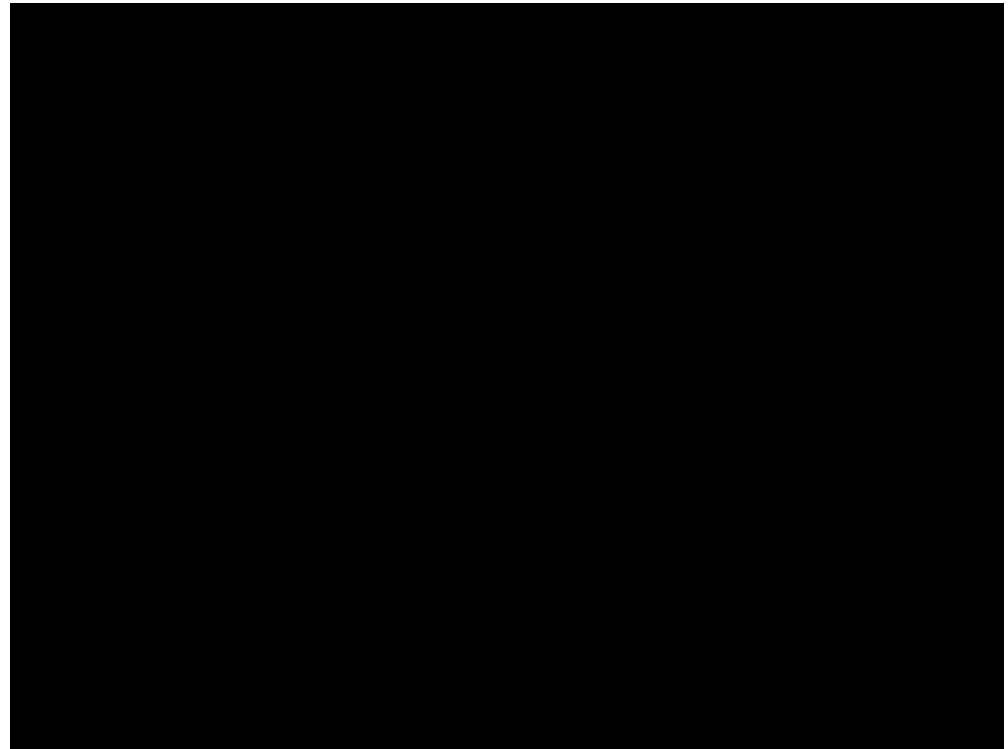
Education and Culture DG

Lifelong Learning Programme

# FIREFIGHT II

## **October 2009 – EU FF II Project partners**

- Accept only safe working environment for Firefighters
- Early response and improved efficiency
- Limit secondary damage from water and smoke
- Minimise environmental consequences of Fire Fighting



Northamptonshire  
County Council



# Practical Training

- Static training venue
- Mobile 20' container -  
Hook loader Skid
- Temperature monitor







# Northamptonshire Fire and Rescue Service



## Incidents with Cobra Deployment





# The Cobra System Incident Deployments



- All building and compartment fires – ventilated or unventilated
- Highrise building fires
- Roof and ceiling fires
- Basement and underground fires
- Container fires
- Thatch roof fires
- Deep seated fires
- Vehicle fires
- Marine vessel fires
- Chimney fires
- Silo fires
- Ducting/ventilation shafts
- Difficult access/hidden fires
- Insulated walls/LISP's
- Inter-agency Deployments







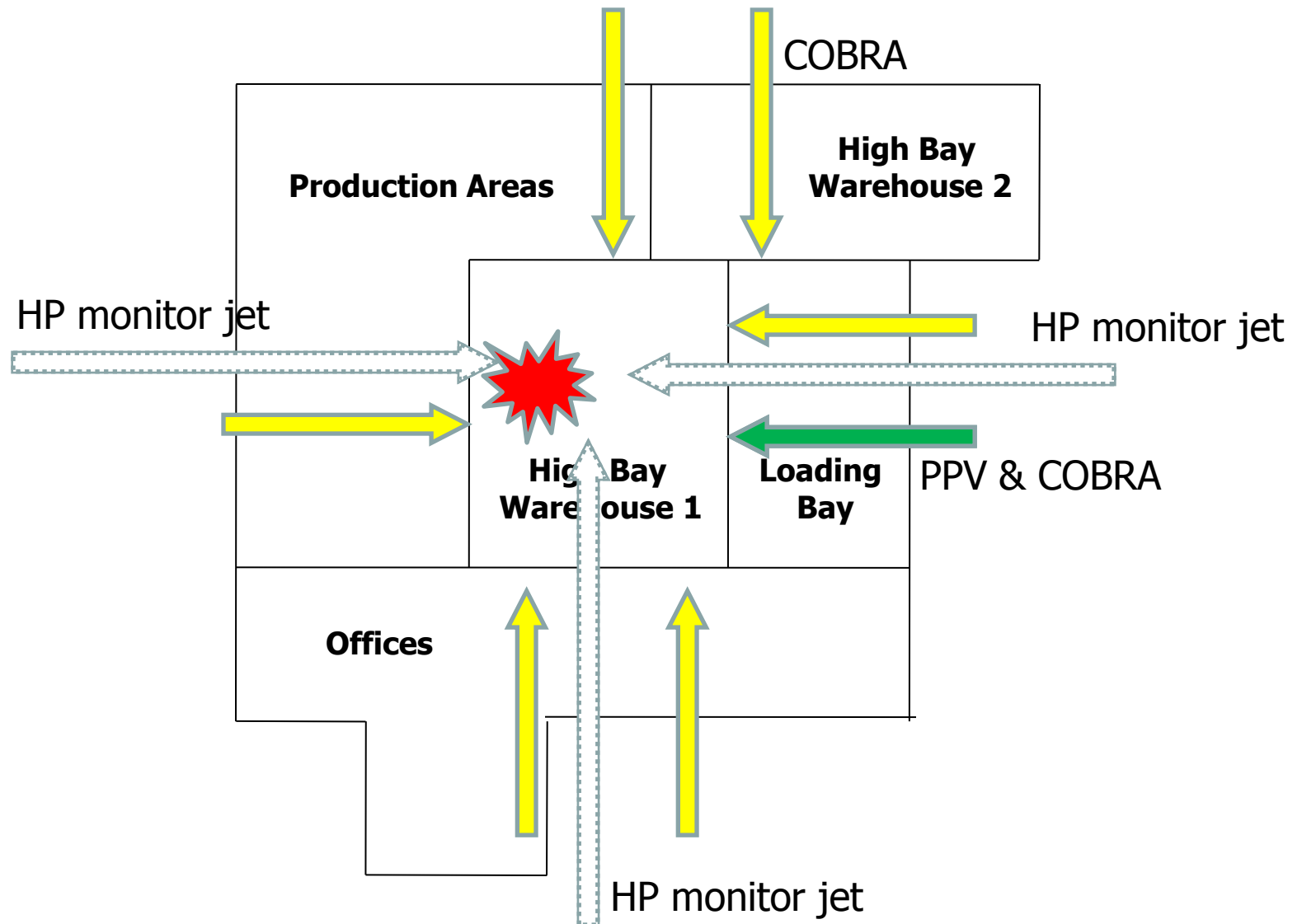


# Catalent Pharma Solutions, Corby

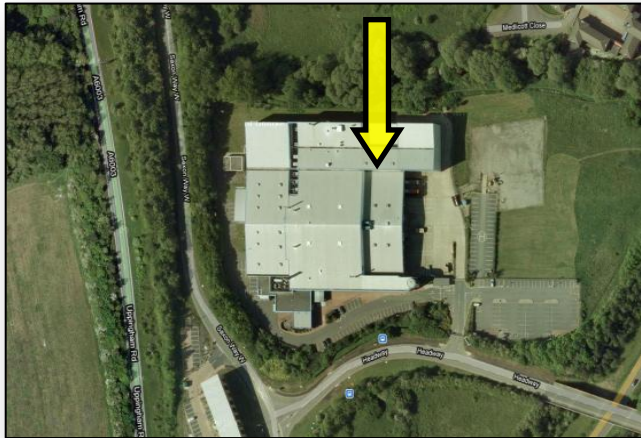


Development, manufacture and packaging services for pharmaceutical, biotechnology and consumer health companies

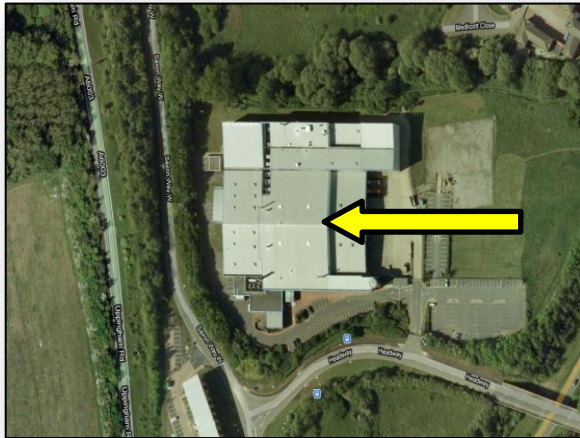


























# Final Consideration

## **Safer Fire Fighting**

## **Better for the Environment**

## **Culture Change**

- Technology – simple
- Integration – into every day
- Reason for introduction – Firefighter Safety
- Easier to use than not use
- Communication
- Visible Leadership

## **Options for the future**

- Change Response Model
- Review Fleet
- Make Financial Savings



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