
com sur™
the missing piece of CCTV
THE FOOTAGE WHISPERER
"SEE WHAT THE CAMERA SAW"
100+ TOPICS - AIRPORTS TO ZOOS

UTILITY VALUE OF COM-SUR™ FOR FIRE STATIONS

WELCOME

AUDIT HOURS OF FOOTAGE IN MINUTES FIND OUT HOW COM-SUR WILL HELP

CCTV surveillance is common in fire stations world over, but footage is often only reviewed reactively. Our company realized this problem early-on and has developed the world's only CCTV video footage auditing software that encourages daily auditing (hours in minutes) of CCTV footage, filling the gap for a complete "workflow". The software works with existing cameras and VMS, regardless of type/brand, and provides a standardized approach for intelligent incident reporting. Our software also offers exceptional investigative capabilities.

'COM-SUR' – THE WORLD'S ONLY CCTV VIDEO FOOTAGE AUDITING, SMART BACKUP, AND STANDARDIZED INTELLIGENT INCIDENT REPORTING SOFTWARE – THE MISSING PIECE OF CCTV

COM-SUR is the world's only CCTV video footage auditing, smart backup, and standardized intelligent incident reporting software that serves as a complete workflow and force multiplier. It helps audit 24 hours of footage in minutes, reduces data size, creates standardized intelligent reports, and delivers business intelligence. COM-SUR helps unlock hidden information in CCTV footage and enables people to gain actionable intelligence, improve homeland security, prevent crime and losses, identify and mitigate threats and hazards, and improve operational efficiency. It empowers people to gain new jobs as CCTV video footage auditors and start new businesses of auditing video footage. Like MS Office, COM-SUR is an enabler that makes it easy to work with CCTV cameras in a standardized way, leading to better decision-making. It also offers exceptional investigative capabilities.

HOW COM-SUR SMARTLY REDUCES 'VIDEO' STORAGE SIZE

COM-SUR employs an innovative approach to smartly reduce the amount of video to be audited and consequently the storage size of videos. Regardless of the video's frame rate, COM-SUR captures a single screenshot of the consolidated 'moment' of 'that' one second, when the I, P, and B frames come together. This method significantly reduces data size without sacrificing vital information. It goes without saying that when multiple cameras are displayed in a grid view, say 4x4, the storage size is further reduced since all the cameras are captured as a single image. Since no suggestion is being made to replace the actual video with screenshots, COM-SUR acts as a wonderful supportive technology both to audit (review) just 86400 frames representing 24 hours and reducing the data size at the same time.

CHALLENGES FACED BY FIRE STATIONS

1. Unauthorized access:

Fire stations need to maintain controlled access to their premises to prevent unauthorized individuals from entering sensitive areas or tampering with equipment. Security breaches can compromise the station's infrastructure, vehicles, or equipment.

2. Theft and vandalism:

Fire stations may be targeted for theft of valuable equipment or vehicles, such as firefighting gear, tools, or electronic devices. Vandalism can also occur, leading to damage to property or essential equipment.

3. Emergency response interference:

Fire stations need to ensure the integrity of their emergency response operations. Any interference, such as false alarms, tampering with emergency equipment, or unauthorized use of vehicles, can disrupt critical services and endanger lives.

4. Public safety concerns:

Fire stations are often open to the public for specific purposes, such as community meetings or educational programs. Ensuring the safety of visitors and preventing incidents such as altercations, harassment, or unauthorized access to restricted areas is crucial.

5. Workplace safety:

Firefighters and other personnel at fire stations face occupational safety risks. Monitoring areas such as vehicle bays, equipment storage areas, and training facilities can help identify potential safety hazards and ensure compliance with safety protocols.

6. Infrastructure protection:

Fire station buildings, equipment, and vehicles are essential assets that require protection. Monitoring critical infrastructure, such as electrical systems, water supply, and communication networks, helps detect malfunctions or unauthorized access that could disrupt operations.

7. Fire prevention:

While fire stations are dedicated to preventing and responding to fires, they also need to ensure fire safety within their own facilities. Monitoring for fire hazards,

conducting routine inspections, and maintaining proper fire suppression systems are essential to protect the station and its personnel.

8. Employee safety and well-being:

Ensuring the safety and well-being of firefighters and staff is paramount. Monitoring areas such as living quarters, dining areas, and fitness facilities can help identify potential risks or ensure compliance with safety guidelines.

9. Insider threats:

Fire stations have to deal with insider threats from disgruntled employees or even unwitting staff who fail to follow proper security and safety measures.

10. Humongous growth of surveillance video:

The exponential growth of surveillance cameras has resulted in an unprecedented surge in surveillance video. Effectively managing this data has become a daunting challenge due to the massive storage capacity required, especially considering the prolonged retention periods necessary for security, incident investigation, or legal purposes. Furthermore, the prevalence of high-resolution video with increasing megapixels compounds the storage demands, making efficient data management an urgent priority for organizations grappling with the immense volume of surveillance footage.

COVID-19 PANDEMIC

The pandemic severely impacted fire stations worldwide. Fire stations faced increased workloads as they had to collaborate with health authorities in various pandemic response activities, including assisting with medical emergencies, transporting COVID-19 patients, and supporting testing and vaccination efforts. Further, fire stations faced staffing challenges due to their personnel being infected or quarantined because of COVID-19. Guidelines were issued to prevent the spread of COVID-19, but outbreaks still occurred.

USE OF VIDEO SURVEILLANCE AT FIRE STATIONS

Most fire stations have video surveillance covering the following areas:

- Entry and exit points
- Vehicle bays and equipment storage areas
- Common areas and administrative spaces
- Emergency response areas
- Training facilities
- Staff rooms
- Parking and other outdoor areas

Further, the concerned stakeholders at fire stations generally need to review and analyse recorded CCTV video footage from time to time for investigating incidents and/or accidents, and other issues in order to corroborate evidence as well as assist police/law enforcement agencies.

USE OF THERMAL CAMERAS

Fire stations as well as firefighters often make use of thermal cameras for various purposes as follows:

1. Fire detection:

Thermal cameras can detect heat signatures and temperature variations, allowing firefighters to quickly identify potential fire sources or hotspots. They are particularly useful in situations where smoke or visibility is limited, as thermal imaging can penetrate smoke, darkness, and other obstacles.

2. Search and rescue:

Thermal cameras can aid in search and rescue operations by detecting the heat signatures of individuals, even in low-light or obscured environments. Firefighters can use thermal imaging to locate trapped or missing persons, increasing the efficiency and effectiveness of rescue efforts.

3. Fire behavior analysis:

Thermal cameras provide valuable insights into the behavior of fires, helping firefighters understand how a fire is spreading, identifying hidden fire pockets, and monitoring the effectiveness of suppression efforts.
This information can guide strategic decision-making and enhance overall firefighting operations.

4. Equipment and machinery monitoring:

Thermal cameras can be used to monitor the temperature of equipment, machinery, and electrical systems within the fire station.
This helps detect any overheating or malfunctions, allowing for proactive maintenance and reducing the risk of equipment failure or fire incidents.

5. Pre-fire planning:

Thermal cameras can assist in pre-fire planning by mapping heat sources, identifying potential fire hazards, and assessing the thermal conditions of different areas within a building or structure. This information helps firefighters develop effective strategies and tactics for firefighting and evacuation plans.

LIVE MONITORING – CHALLENGES

Some fire stations have a dedicated control room with operators, set up for live monitoring of CCTV cameras. However, live monitoring comes with its own set of challenges of video blindness, poor attention span, boredom, operator bias, false alerts, and so on.

Moreover, these cameras continuously capture and record humungous amounts of video data. It therefore becomes a daunting task for the operators to review and analyse this data whenever the need arises. Thus, it may be noted that benefits from video surveillance systems can accrue only when they are used optimally, suggestions for which are enumerated further on, in this document.

COMPLIANCE - GENERAL

Conformity or compliance in any organization means adherence to laws and/or rules and regulations, various standards, as well as data storage and security requirements as laid down by government bodies, governing bodies of the respective industry, or the management of the organization. When an organization complies with the requirements mandated by government and/or governing bodies, then it is termed as ‘regulatory compliance’ which enables the organization to run in a legal and safe manner.

COMPLIANCE - AUDITS

Several organizations carry out compliance audits on a regular basis to avoid the potential consequences of non-compliance. A compliance audit examines how well an organization adheres to compliance requirements. Some organizations use video surveillance to monitor compliance issues and audit recorded CCTV video footage from time to time for investigating and preventing compliance issues. Auditing CCTV provides actionable insights on the level of compliance within the organization.

AUTOMATED SOFTWARE – WHY THEY WILL NOT WORK IN ISOLATION

In the wake of the Christchurch shooting incident, several high-profile places of worship considered deploying gun detection technology. However, there are concerns about its efficacy, since it may not be able to detect all types of weapons, or the perpetrator could still create damage before being detected.
Similarly, automated systems like video analytics, AI/ML can only detect what they have been programmed for. What about the rest? Again, these technologies are prone to triggering huge amounts of false alarms.
Also, since the permutation combinations of exceptions can be vast and varied, it becomes almost impossible to automate every kind of exception. Facial recognition technology also raises ethical and privacy concerns, and has been found to produce inaccurate results, especially for certain ethnic groups.
Therefore, experts suggest that while automated technologies will continue to grow, human intervention and intelligence will still be necessary to verify alerts and ensure their efficacy.

"CCTV IS NOT ENOUGH – WE MAKE IT WORK FOR YOU"

While it is not being suggested that optimal usage of video surveillance can cure all issues, several issues of the following kind can be addressed by doing just a little 'more' with respect to making the optimal use of video surveillance systems:

- Potential causes of fires

- Recces/suspicious movements/activities

- Insider job/security lapses

- Equipment malfunction/other technical issues

- Violence and vandalism

- Unauthorized/unlawful activities/visitors

- Accidents/Causes of potential accidents

- Loss/theft

- Intrusions, especially by animals

- Parking issues

- Inattentive staff (e.g. guard sleeping)

- Unruly staff/visitors/outside workers /security guards

- Unclaimed/unattended objects

- Health and safety issues

- Issues with female staff or visitors

- Cameras/recorder malfunctions

So, what is the 'more' that needs to be done?

1) AUDIT CCTV VIDEO FOOTAGE DAILY AS A STANDARD OPERATING PROCEDURE

'Auditing' means 'seeing' what the cameras 'saw'. Auditing of CCTV footage should be done daily (continuous investigation) to identify potential issues and threats. Auditing is a dedicated and systematic process that helps address challenges related to live monitoring and alert-based systems. Auditing helps in evaluating analyzing incidents to improve existing policies, procedures, and processes. Concerned personnel should be trained to become CCTV video footage auditors, and the audit teams should be rotated to avoid complacency/collusion. Daily auditing of CCTV footage can also help in adhering to the principles of Kaizen and TQM for business improvement.

2) DOCUMENT AUDIT FINDINGS/INCIDENTS

Audit findings/incidents should be documented in a standardized template to find the root cause to prevent future recurrences. Historical data of such findings/incidents can reveal patterns that can help take better informed corrective and preventive action. If all fire stations report incidents in a standardized template, relevant authorities can derive business intelligence from the data and take action for the collective benefit of all fire stations.

3) ENSURE DISASTER RECOVERY OF CCTV VIDEO FOOTAGE – LIKE A 'BLACKBOX'.

CCTV video footage must be stored at multiple locations in order to ensure that even if the recorder is stolen, destroyed or tampered with the data is never lost. Further, any backed-up data must easily be searchable and retrievable; else, it is going to be a nightmare finding the relevant video.

4) DISPLAY DYNAMIC INFORMATION AT RELEVANT PLACES

Document and display details of information that is dynamic in nature in relevant areas. For example:

1. List of authorized staff.

2. List of authorized security personnel deployed at the fire station.

3. List of potential suspects/miscreants likely to visit the fire station's premises (a 'Watch out' list).

5) USE A POWERFUL NEW SIGNAGE

"WE AUDIT CCTV VIDEO FOOTAGE EVERYDAY".

One size, one color, one powerful message. Across the nation.

DE-CENTRALIZED SURVEILLANCE + CENTRALIZED SURVEILLANCE = OPTIMAL RESULTS

Organizations with multiple locations struggle with centralized video surveillance due to infrastructure cost, internet bandwidth, and operator limitations. De-centralized surveillance offers higher accountability at each location and better situational awareness, leading to more chances of discovering exceptions.

CONCLUSION

"You see, but you do not observe" is a quote by Sherlock Holmes in A Scandal in Bohemia (1891, written by Sir Arthur Conan Doyle).
COM-SUR makes 'observation' far effortless and effectual leading to superior results.

"Cameras don't lie" - but how will you know unless you 'see' what the cameras 'saw'?
Audit CCTV - why suffer!

Get award-winning COM-SUR now.
Don't wait for things to go wrong!