

# ROYAL AIR FORCE MILDENHALL FIRE & EMERGENCY SERVICES



## 2023 COMMUNITY RISK ASSESSMENT/STANDARDS OF COVER

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RAF MILDENHALL, UNITED KINGDOM

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AIRMEN - READINESS - CULTURE

## Introduction

The Royal Air Force Mildenhall Fire Emergency Services (RAFM F&ES) Flight provides assistance to our community through an average of 327 emergency responses each year. Based upon past response data and a thorough analysis of the operations, facilities, and hazards on RAF Mildenhall (RAFM), we are able to develop a detailed Community Risk Assessment: Standard of Cover (CRA/SOC) document containing the services we provide such as public fire education, fire prevention, support services and a comprehensive risk assessment/analysis.

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## **Executive Summary**

The RAFM F&ES Community Risk Assessment: Standard of Cover (CRA/SOC) is a compilation of data and analysis that profiles the service delivery, (emergency and non-emergency) afforded to RAFM and surrounding communities. Under the direction of the Installation Fire Chief (IFC), a team of Fire Officers were assembled, assigned specific roles and responsibilities, and worked together to evaluate the structural fire hazards within our 10 Fire Demand Zones (FDZ). In addition, non-structural risk categories such as aircraft emergencies, emergency medical services, hazardous materials and technical rescue were charted according to hazard probability and severity.

After careful analysis of the hazards and associated risks to the RAFM complex and the local area, a comprehensive review of our current service standards, goals and objectives was performed. Total aggregated response times were measured against current DoDI 6055.06 standards, concept of operations (CONOPS), and fire station distribution and concentration evaluated for adequacy. All capabilities (based on manpower, vehicles, and equipment) were reviewed, and a corresponding level of service was assigned. These levels of services reflect the scope and ability RAFM F&ES can perform the critical tasks inherent to each type of emergency. In addition, the Flight's incident response posture was chronicled along with our level of commitment to other base and local emergency response entities and non-emergency standby responsibilities.

Historical performance is another facet to consider in the development of our CRA/SOC. Following a review of emergency and non-emergency response data, the information was evaluated several ways, to include incident type, time of day, and day of week, and finally compared to Air Force averages to determine the appropriateness of staffing levels, fire prevention efforts, and areas of general concern. Although research and data analysis provide useful information, the real benefit of this CRA/SOC is in its evaluation and summary section. Utilizing static information as a basis, senior fire officers can take this information and make dynamic decisions that ensure future mission success.

## **Community Served**

### **Community Overview**

The 100th Air Refueling Wing (ARW) is RAFM's host wing and the only permanent U.S. air refueling wing in the European theater. The wing was activated in the UK on February 1, 1992; it provides the critical air refueling "bridge" that allows the Expeditionary Air Force to deploy around the globe on a moment's notice. RAFM is a Royal Air Force (RAF) station located in Suffolk, England. Despite its status as an RAF station, it primarily supports United States Air Force (USAF) operations. RAFM is also host to tenant units that are assigned from different Major Commands (MAJCOM) from across the Air Force. Units assigned to RAFM are the 352nd Special Operations Wing (SOW) assigned from Air Force Special Operations Command (AFSOC), the 727th Air Mobility Squadron (AMS) assigned from Air Mobility Command (AMC), the 95th Reconnaissance Squadron and the 488th Intelligence Squadron both assigned from Air Combat Command (ACC). A United States Air Forces in Europe (USAFE) unit, the 100th ARW is RAFM's "host wing," supporting some 13,097 personnel and three geographically separated units. RAFM enjoys a great relationship with nearby villages and the town of Mildenhall.

### **RAF Mildenhall Mission**

***"Provide a Ready Force and Strategic Forward Base, Projecting Air-Power through Unrivaled Air Refueling Across Europe and Africa"***

### **RAF Mildenhall Vision**

***"Assuring Reach and Deterrence – Powered by Airmen & Partnerships"***

### **RAF Mildenhall Priorities**

- ❖ ***"Airmen"***
- ❖ ***"Readiness"***
- ❖ ***"Culture"***

### **Internal and External Stakeholder Input**

RAFM F&ES maintains relationships with many internal and external stakeholders here at RAFM. Examples of our stakeholders are the 100th Air Refueling Wing, 352nd Special Operations Wing, 95th Reconnaissance Squadron, 727th Air Mobility Squadron, 488th Intelligence Squadron, 48th Fighter Wing, Norfolk County Fire Rescue Brigade, and Suffolk County Fire Rescue Brigade. During our annual review, we invite all these agencies to participate in the development of our goals and objectives. Once they are developed, the goals and objectives are incorporated into the Strategic Master Plan which is then signed by the Fire Chief. Internal and external stakeholders are free to review this Plan at their pleasure.

### **History**

RAFM has a long and storied history as home to both RAF and USAF personnel and aircraft. To meet a perceived "continental threat", the British military developed the idea to site an RAF bomber base near Mildenhall in the late 1920s. The government purchased the land in 1929 and began completing the first buildings in 1931. Three years later, RAFM opened on October 16, 1934, as one of the RAF's largest bomber stations.

Throughout World War II, Mildenhall remained very active. In addition to its own airfield, the base held responsibility for satellite airfields at Newmarket, Tuddenham, and Lakenheath. For the duration of the war, except for a brief period to have concrete runways laid in 1943, RAFM was involved in almost all of RAF Bomber Command's many offensives against Germany. By the end of the war, aircraft from RAFM and its satellite airfields dropped over 23,000 tons of explosives, laid 2,000 mines in enemy waters, and flew over 8,000 sorties.

Immediately following the war, Mildenhall participated in humanitarian missions, flying home repatriated prisoners of war, and dropping relief supplies to the Dutch people stranded by the flooding caused by the retreating German Army. By the end of 1945, Mildenhall's operational activity experienced a drastic decrease, and despite a brief flurry of flying activity in the late 1940s, the RAF reduced the base to "care and maintenance" status.

On July 12, 1950, the 93rd Bomb Group (BG) arrived at RAFM and ushered in the presence of the United States Air Force. Over the next year, several other bomb groups deployed to RAFM until in October of 1951, Strategic Air Command (SAC) took control of the station and bombers rotated in and out of RAFM on temporary duty assignments. This presence lent credence to Sir Winston Churchill's statement that their presence in England was the primary deterrent keeping the Soviets from overrunning Europe.

On July 17, 1959, SAC and USAFE reached an agreement facilitating and substantially increasing

Third Air Force's role in making operational decisions regarding the US Air Force units in the UK. In late 1959, RAFM became the home for the Military Air Transports Service (later Military Airlift Command) Air Passenger Terminal for the United Kingdom, with the 7513th Air Base Group providing service to the terminal.

Over the period from 1965 to 1972, several other tenant units relocated and operated out of RAFM and in 1979, SR-71 and U-2 aircraft arrived, becoming permanently stationed here in 1983. From the arrival of the first SR-71 until the departure of the last aircraft on Jan 19, 1990, the SR-71 came to symbolize RAFM in the local public's eye.

Finally, on 1 February 1992, the 100th ARW was activated and the return of the "Box D" to the country in which it built its war fighting heritage and legacy. Three years later, the 352d Special Operations Group relocated from RAF Alconbury. Both units are now the current back bone to RAFM and operate worldwide in both war and humanitarian operations

### **Population Demographics**

RAFM F&ES serves a population of 13,097 active-duty military, dependents, local nationals, civil service, and contract personnel. Of the total population, the largest percentage live in small villages within a 5 – 20-mile radius of RAFM. Due to being a military community, the majority of the active duty and dependent population is middle class with an average age of 28 years old. Our community demographics also show the majority of the population being physically fit and medically healthy due to military standards and healthcare provided. For the purposes of this CRA/SOC, the RAFM F&ES response area is identified as an urban population center, in accordance with U.S. Census Bureau guidance.

### **Geography, Geology and Climate**

RAFM is located in the English County of Suffolk, in the region of East Anglia, England, which is a predominantly rural farming area. The installation sits on 1,162 acres of land (approximately 50.6 million square feet). RAFM is located 19 miles from the city of Cambridge and 65 miles from the city of London. The elevation of the base currently sits at 33 feet above sea level. RAFM land use and the local community consists of business, residential, and light industrial areas. The climate is wet with an annual precipitation of 35 inches and an average humidity of 35%. Temperatures vary from an average low of 30 degrees to an average high of 80 degrees.



### **Transportation Systems**

RAFM is accessible from two roads, the A1101 which leads to the Main Gate and West Row Road which leads to the West Row Gate. The West Row Gate accesses the south side of the installation. The A1101 and West Row Road both converge at the A11, which is a dual-carriage way that eventually leads to the M11, the only Motorway (major highway) that accesses the London metropolitan area. The A1101 is heavy traffic and high-speed roadway which is designated as a “Single Carriageway” road that has a max speed of 60 miles per hour and a minimum speed of 30 miles per hour. We would utilize both these roads in the event of a mutual aid response. These two roads can impact mutual aid responses during peak traffic hours at round-a-bouts located just before the Main Gate of RAFM and Mildenhall town center.



### **Critical Infrastructure**

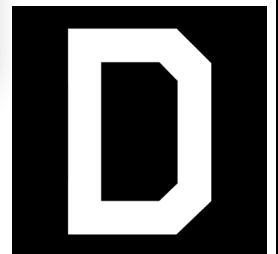
When we conducted our CRA, we heavily considered the critical infrastructure of the installation. Any threats, vulnerabilities, weaknesses, or performance gaps associated with the infrastructure was also included in this assessment. The critical infrastructure of RAF Mildenhall is assessed and documented in the 100th Air Refueling Wing (ARW) Contingency Response Plan (CRP) 10-211 which is maintained by the 100th Civil Engineer Squadron, Operations Management Flight.

### **RAFM CRITICAL INFRASTRUCTURE LIST**

<b>PRIORITY</b>	<b>FACNAME</b>	<b>FACNO</b>	<b>MGRS Easting</b>	<b>MGRS Northing</b>	<b>ATLFAC</b>
1	R/W AND OVERRUNS	1028	3035	385	
2	T/W A	1041	2821	472	
3	T/W B	1041	2821	472	
4	T/W C	1070	2869	443	
5	T/W D	1025	2800	461	
6	HAMMERHEAD 38	1038	2750	438	
7	HAMMERHEAD 37	1037	3011	379	
8	HAMMERHEAD 36	1036	3018	403	
9	HARDSTAND 65	1043	2839	365	
10	CP, COMM	591	2817	529	809
11	BASE OPS, WEATHER, COMM, FIRE DEPT	669	2866	490	18
12	100 MXG/MXS/MOS/MOC	814	2892	346	711
13	SOG HQ, 100 LRS/MXS/TRANSIENT ALERT	550	2800	502	712
14	MEDICAL CLINIC	830	2865	343	
15	100 LRS/LGRF FUELS OPS HQ RCC	725	2810	382	704
16	TACAN/100 CS	622	2897	442	
17	GLIDESLOPE/100 CE (NAVAID C/W LIGHTS)	1063	2989	413	
18	NAVAID TOWER	1065	2776	497	
19	100 LRS/CC HQ, WAREHOUSE, 100 CS NOC	582	2797	516	725 - LRS/HQ
20	POWER STATION (AFLD LTG VAULT/29 LOCALIZER)	702	2743	442	
21	High Voltage Feed (for the entire base)	638	2886	481	
22	POWER STATION (AFLD LTG VAULT/11 LOCALIZER)	798	3014	363	
23	RUNWAY TRAFFIC LIGHTS	1034	3020	389	
24	RUNWAY TRAFFIC LIGHTS	1034	2747	464	
25	100 OG/100OSS/SQ OPS/351 ARS/AMXS/MOS	809	2880	354	669, 774
26	100 ARW HQ	239	2790	557	
27	SQ OPS/488 ISS (CONTROL CENTER)	523	2785	510	
28	SQ OPS/488 ISS	525	2782	499	
29	SQ OPS/352 OSS	619	2893	474	
30	SQ OPS/352 OSS/100 OSS+B187	621	2899	468	

### **Legal Basis**

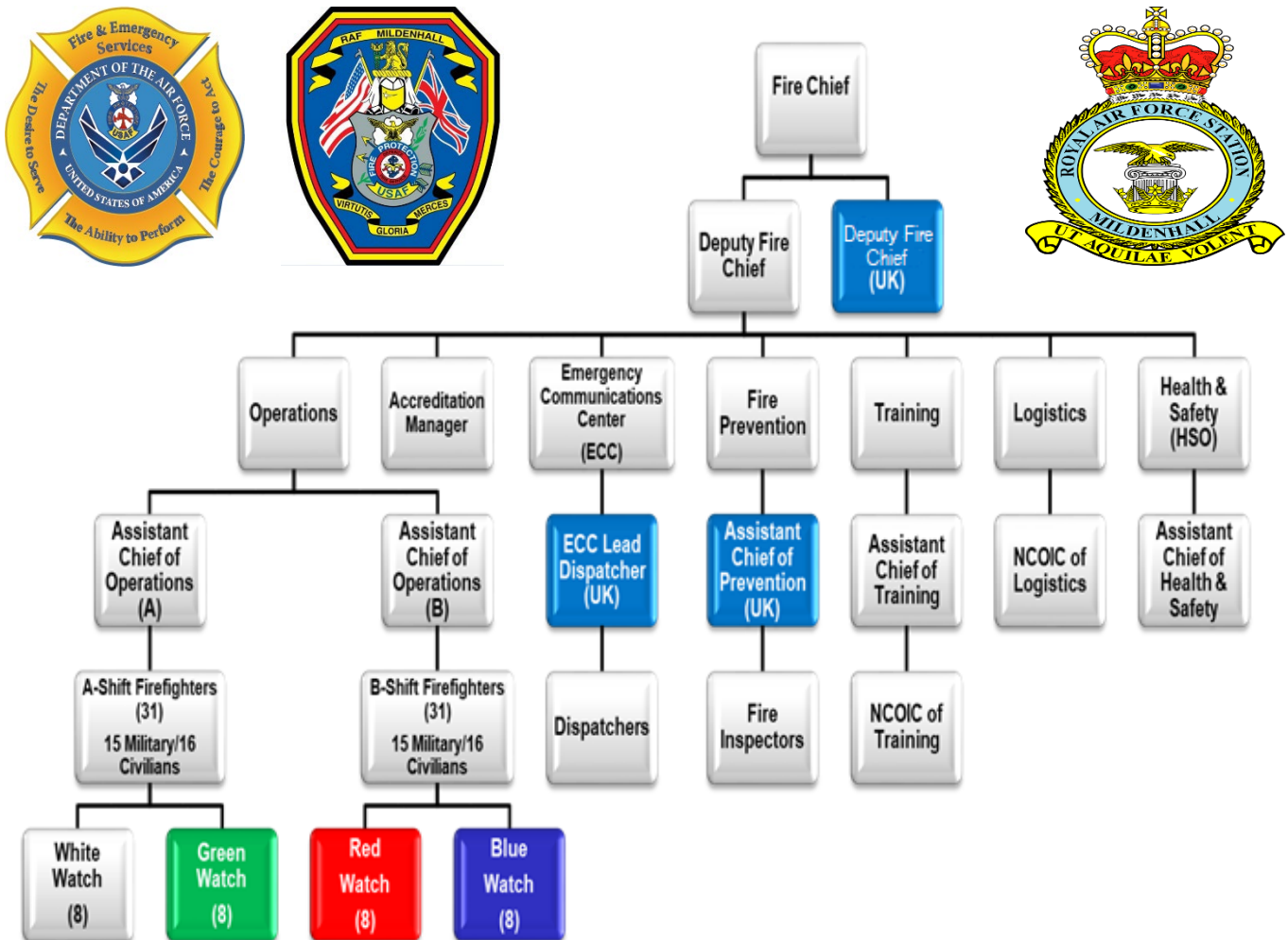
The RAFM Fire Emergency Services Flight is legally established by Department of Defense Instruction (DoDI) 6055.06, Department of Defense Fire and Emergency Services Program, Air Force Policy Directive (AFPD) 32-20, Fire Emergency Services, and Air Force Instruction (DAFI) 32-2001, Fire Emergency Service Program. DoDI 6055.06 states that every DoD component shall establish and maintain an installation firefighting, fire prevention, and emergency services program. AFPD 32-20 is more specific in outlining the requirements for providing emergency service capabilities to the Air Force Installations. It requires the Air Force to maintain fire protection services to respond to emergencies involving hazardous materials, emergency rescues, and first aid. DAFI 32-2001 outlines specific responsibilities for the effective execution and management of the fire protection organization.





## Department Information

### Organizational Model



### Directives

Our agency is governed by DAFI 32-2001, Fire Emergency Services Program. It delineates specific criteria for each Air Force Fire Emergency Services Flight. Additionally, our agency is governed by Department of DoDI 6055.06, Fire & Emergency Services Program. These publications are also supplemented by Unified Facilities Criteria, Air Force Occupational Health & Safety Standards, National Consensus Standards and federal law. These publications can be found online and are available to all employees at RAFM.

### **Fire Emergency Services Mission**

The mission of the RAFM F&ES Flight is to provide programs designed to protect the lives, property and environment of the inhabitants of RAFM, United Kingdom from the adverse effects of fires, medical emergencies and exposure to hazardous conditions created by either man or nature. Our mission statement is: "Dedicated to protecting life and property in our community through professionally delivered fire prevention, public education, and emergency services."

### **Organizational Principles**

- ❖ Put the Customer First
- ❖ Empower members, treat them with respect and recognize their performance.
- ❖ Encourage visionary leadership & support diversity in ideas and people.
- ❖ Never compromise fire service standard and ethics
- ❖ Lead & motivate by the quality and spirit of our actions.
- ❖ Plan, Do, Study, Act and make decision based on facts.
- ❖ Use resources wisely, respect and care for the environment.
- ❖ Strive for continuous improvement.
- ❖ Do the right thing the first time.
- ❖ Have a constancy of purpose.

### **Department Overview**

The RAFM F&ES Flight is staffed by trained fire protection personnel and is organized into five major elements: Operations, Prevention, Training, Communications, and Administration. The Fire Chief is responsible for the overall administration of RAFM's F&ES Flight. We have a total authorization for 77 personnel which is made up of 5 Ministry of Defense (MOD) Defense Fire Risk Management Organization (DFRMO) Civilian employees, 33 Local National Direct Hires (LNDH), and 39 United States Air Force military members; staffing is based upon Air Force Manpower Standard 44F1, Fire Protection. Firefighters are expected to be certified at the minimum:

- ❖ Firefighter I
- ❖ Firefighter II
- ❖ Hazardous Materials Awareness
- ❖ Hazardous Materials Operations
- ❖ Airport Firefighter
- ❖ Emergency Medical Responder

Certification for all positions are in accordance with NFPA Standards for Professional Qualifications, DoDI 6055.6M Fire and Emergency Services Career Field Education and Training Plan (CFETP).

RAFM firefighters' control, neutralize, mitigate, and/or extinguish any fire or emergency situation occurring within base boundaries. Firefighters also perform containment and control measures at hazardous materials incidents and if need be, are fully equipped and trained to perform technician level tasks. Assistance from other agencies such the 100th Civil Engineer Squadron, Emergency Management Flight, and 48th Medical Group, Bioenvironmental Engineer Flight, may be necessary to successfully mitigate some incidents. Mutual aid from Suffolk & Norfolk County Fire Rescue Services or RAF Lakenheath (RAFL) may be requested for incidents beyond the capabilities of this department.

First responder emergency medical assistance is provided by on site medics under the authority of the 48th Medical Group from nearby RAFL. A memorandum of agreement and established protocols require the department to supply 2 x Medics and Ambulance to attend emergencies that occur on RAFM. The transport of patients is accomplished through the 48th Medics or off-base civilian ambulance, which are also required in advanced life support situations.

Assistance to outside agencies in the surrounding community for various types of support is rarely requested (few times per year). Mission permitting, all requests will be met. Response recommendations are made by the Fire Chief with final approval residing at the wing level. Services are covered under a Memorandum of Understanding.



The Fire Department Dispatch Center is centrally located within our fire station and is staffed with five personnel (One supervisor & four dispatchers (2 x civilian and 2 x military)). The establishment of a new alternate Fire Department Dispatch Center within Building 680 awaits final completion of the instalment of an E911 workstation, and an upgrade to the current radio provision to achieve full functionality. The department has completed the upgrade to the new D-21 Monaco Emergency Management (EM) System, and this significantly enhances our capabilities in terms of enabling Mobile Data Displays for each apparatus that are all linked to both Fire Department Dispatch Centers of RAFM and RAFL F&ES, Point Reporting, Advanced Voice Recording, Automated Vehicle Locating, Haz-Mat Plume Modeling, EM Mapping, Station Alerting and Remote Station Controls. Currently, RAFM F&ES, 100th Security Forces Squadron, and the 48th Medical Group Emergency Room possess the capability to receive on-base/off-base emergency calls that are dialed using the UK “999” emergency number, and this capability has been strengthened by a recent upgrade of the operating system, and refreshed hardware to assist utilization.

### **Fire Station**

Our fire station operates on RAFM providing optimum level of service staffing with an Operations Chief on duty 24 hours a day/7 day a week. Additional functional elements such as Fire Prevention, Training, Logistics, Health & Safety, Fire Dispatch Center, Vehicle Maintenance, and the Administrative Section are also located in the fire station.



## **Work Schedules**

Our military operations firefighters work alternating 48-hour shifts with a break day every two weeks. The civilian operations firefighters are a mix of Ministry of Defense (MOD) and Local National Direct Hire (LNDH) and work a 24-hour shift with a 72-hour break. The administrative staff primarily works a traditional 0700 – 1630 schedule.

## **Staffing**

### **Department Staff:**

- ❖ Installation Fire Chief
- ❖ Deputy Fire Chief (US Military)
- ❖ Deputy Fire Chief/Station Manager (UK)
- ❖ Assistant Chief of Fire Prevention
  - ❖ 3 Fire Inspectors/Life Safety Educators
- ❖ Assistant Chief of Training
- ❖ Assistant Chief of Health & Safety
- ❖ Assistant Chief of Operations (A-Shift)
- ❖ Assistant Chief of Operations (B-Shift)
- ❖ Non-Commissioned Officer-in-Charge (NCOIC) of Logistics
- ❖ Fire Department Dispatch Center Lead Dispatcher
  - ❖ LNDH Emergency Dispatchers
  - ❖ 2 Military Emergency Dispatchers

The Assistant Chiefs of Operations and Station Chiefs direct shift schedules in accordance with DAFI 32-2001. Efforts will be made to achieve Optimum Level of Service (OLS) for each duty day, although the Air Force considers operating at a Reduced Staffing Level (RLS) to be normal day-to-day staffing level. If staffing levels reduce our response capabilities, notifications will be made directly to the Fire Chief via the Assistant Chief of Operations. DAFI 32-2001, defines levels of service as:



### **Optimum Level of Service (OLS)**

The OLS is available when all authorized resources (vehicle set to provide required agent, required discharge capacity; and authorized manpower for fire ground capability) are available. At the OLS, a maximum level of service can be continuously provided, when determined appropriate by the Fire Chief. During OLS, firefighting forces are capable of providing all services continuously throughout an event with reasonable expectation of successful offensive fire attack operations, search and rescue, and property conservation.

### **Reduced Level of Service (RLS)**

The RLS is when available resources are less than the OLS requirements but greater than CLS. During this level, adequate firefighting capability can be provided by utilizing cross staffing, selective response and sound fire ground tactics. At the RLS, firefighting forces should be successful in offensive fire attack operations, search and rescue, and property conservation. However, operations may not be sustainable throughout an event without additional resources.

### **Critical Level of Service (CLS)**

The CLS is when resources available to provide at least one appropriate vehicle and crew to each FDZ within the response time standard. Although acceptable, CLS is the absolute minimum level of service and should only be allowed for short durations. At this level, it is reasonable to expect firefighting forces will be successful in quick fire attack operations. Firefighting crews may provide limited search and rescue and property conservation during this period. However, these operational capabilities cannot be sustained without additional resources.

### **Inadequate Level of Service (ILS)**

ILS is when fewer resources than required for CLS are available. ILS is comprised of a minimum of one Fire Company consisting of four personnel and one appropriate firefighting vehicle. Interior operations are not allowed except when necessary for rescue operations. If no rescue is required or rescue is not feasible, exterior operations such as exposure protection and support of fire suppression systems are the primary objectives. Property involved in fire is expected to be destroyed. When less than 4 firefighters are available, interior operations are not permitted even if rescue is needed.

It is assumed that only one major event will occur at a time on the installation. Based on historic emergency response data, the most probable and frequent major fire emergency event to occur on an installation is a fire at one location inside or outside an aircraft, or a fire in a structure that has not progressed beyond the room and area of origin.



## RAFM F&ES STAFFING LEVELS

Levels of Service		CLS	: Reduced Level of Service (RLS)								: Optimum Level of Service (OLS)								
Total Personnel On- Duty		7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Manned Vehicles	Chief-2 (Ford SUV) Command Vehicle	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2
	Crash-5 (Striker 3000)	1	1	2	2	2	3	3	3	3	3	3	3	3	3	3	3	3	3
	Crash-6 (T-3000)	1	1	1	2	2	2	3	3	3	3	3	3	3	3	3	3	3	3
	Crash-7 (Striker 1500)	1	1	1	1	2	2	2	3	3	3	3	3	3	3	3	3	3	3
	Engine-12 (P-22)	3	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	Engine-13 (P-22)	0 (3) C M	0 (3) C M	0 (4) C M	0 (4) C M	0 (4) C M	0 (4) C M	0 (4) C M	0 (4) C M	1 (3) C M	2 (2) C M	3 (1) C M	4	5	5	4	4	5	5
	Rescue-3 (P-30) Rescue Truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	3	3	3
	Tanker-26 (P-26) Water Tender	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1

CM: Indicates That 2nd Structural Apparatus is Cross-Manned from Crash Vehicles

To Achieve OLS for Working Structure Fire (13 on scene) drop Crash 7, Man Rescue

Manning Below 7 On-Duty Personnel Indicates an Inadequate Level of Service Condition (BLACK)

Daily target staffing level is maintained at 13 firefighters for a full structural response.

## Vehicles

RAFM F&ES operates a total of 12 response apparatus which includes: 2 Command Vehicles, Striker 1500 & 3000 Aircraft Rescue & Firefighting (ARFF) vehicles, 2 P-22 Structural Pumpers, P-23 ARFF vehicle, T-3000 ARFF vehicle, P-26 Water Tender, P-30 Medium Rescue Truck, P-34 ARFF Rapid Intervention Vehicle, P-31 Hazmat Response Truck, plus 3 support vehicles that are available for use. Our apparatus are maintained by 3 mechanics from the 100th Logistics Readiness Squadron, Vehicle Maintenance Flight. The mechanics are staged within the department facility and have a dedicated stall/work area which makes maintenance and reporting discrepancies very convenient. If any discrepancies exceed their in-house capabilities, the mechanics are able to bring the apparatus across the street to building 610, where the main heavy equipment vehicle maintenance shop is located.



### **Support Equipment**

RAFM F&ES can call upon a number of support trailers that assist us in either emergency operations, fire prevention education/community outreach programs. We currently possess 2 Aqueous Film Forming Foam (AFFF) trailers with a capacity of 1,000 gallons each. 1 Hazardous Materials trailer, 2 Bauer mobile air compressor trailers, and 1 fire prevention trailer. All RAFM F&ES support trailers are capable of being towed around the installation by Unit-17.

<b>RAFM F&amp;ES Vehicle &amp; Support Trailer Roster</b>			
<b>Vehicle Type</b>	<b>Registration Number</b>	<b>Call Sign</b>	
<b>Ford Excursion</b>	<b>04B 02133</b>	<b>Chief-1</b>	
<b>Ram 1500</b>	<b>19B 022281</b>	<b>Chief-2</b>	
<b>Ford F-350</b>	<b>08B 01650</b>	<b>Unit-17</b>	
<b>Ford Ranger</b>	<b>04B 00401</b>	<b>Unit-16</b>	
<b>Chevy Express</b>	<b>04B 01805</b>	<b>Command-1</b>	
<b>P-30</b>	<b>01C 00056</b>	<b>Rescue-3</b>	
<b>P-23</b>	<b>95L 00182</b>	<b>Crash-4</b>	
<b>Striker 3000</b>	<b>08L 884</b>	<b>Crash-5</b>	
<b>T-3000</b>	<b>01L 0003</b>	<b>Crash-6</b>	
<b>Striker 1500</b>	<b>08L 00002</b>	<b>Crash-7</b>	
<b>P-31</b>	<b>20L 00032</b>	<b>Hazmat-11</b>	
<b>P-26</b>	<b>07L 0400</b>	<b>Tanker-26</b>	
<b>P-22</b>	<b>11L 0094</b>	<b>Engine-12</b>	
<b>P-22</b>	<b>11L00188</b>	<b>Engine-13</b>	
<b>P-34</b>	<b>14C 00042</b>	<b>Crash-14</b>	
<b>Foam Trailer</b>	<b>99X 800005</b>	<b>Foam-20</b>	
<b>Foam Trailer</b>	<b>91X 200004</b>	<b>Foam-21</b>	
<b>Haz-Mat Trailer</b>	<b>11X 16088</b>	<b>N/A</b>	
<b>Bauer Trailer 1</b>	<b>12X 16086</b>	<b>N/A</b>	
<b>Bauer Trailer 2</b>	<b>12X 16087</b>	<b>N/A</b>	
<b>Fire Prev. Trailer</b>	<b>12X 16085</b>	<b>N/A</b>	

### **Distribution**

Our primary measurement to evaluate distribution is response times. Proper distribution is necessary to ensure first-due vehicles arrive promptly and can mitigate any emergency. As the base property grows, we will continue to re-evaluate to ensure we meet our goals.

### **Remote Airfield Operations**

RAFM F&ES currently performs remote airfield standbys at RAF Sculthorpe, located 35 miles northeast of RAFM and 20 miles from the town of King's Lynn. RAF Sculthorpe is a retired RAF base with deactivated runways and taxiways. The 352nd Special Operations Wing (SOW) uses RAF Sculthorpe for various special operations training missions such as infiltration, exfiltration, airdrops, drop zones (DZ), and Forward Air Refueling Points (FARP). Per the 44F1, FES Manpower Standard, Variance #6, Positive Mission Variance for Remote Fields 12 Hours, we are authorized additional manpower to support this mission. RAFM stages one ARFF vehicle at RAF Sculthorpe and is readily available when a mission takes place.

### **Training**

Minimum proficiency training subjects and frequencies are in the Career Field Education and Training Plan (CFETP), DoD 6055.06 - Fire Emergency Services Certification Program, and the Air Force Fire Emergency Services Training Plan. Qualified members provide all training and education and all exercises are conducted within established standard operating procedures, are supervised by qualified instructors, and have a designated safety officer for all evolutions. All firefighters maintain current certification in self-contained breathing apparatus, Cardiopulmonary Resuscitation, EMS and Hazardous Materials operations. We maintain several specialized teams to include confined space rescue and high angle rescue with members of each team receiving specialized training annually.



**Firefighter Certification Program:**

All RAFM F&ES military and US civilian firefighters are certified for their current duty positions in accordance with DoDI 6055.06-M, Department of Defense (DOD) Fire and Emergency Services Certification Program.

Duty Position	Certification Levels
<b>Firefighter (Entry Level)</b>	None
<b>Firefighter (1) AMN - A1C/S-6,S-7</b>	Firefighter I & II Airport Firefighter HAZMAT Operations
<b>Driver/Operator (2) A1C – SrA/S-6, S-7</b>	Driver Operator Pumper Driver Operator ARFF Driver Operator MWS
<b>Dispatcher S-6</b>	Telecommunicator II HAZMAT Awareness
<b>Lead Firefighter/Crew Chief SrA – SSgt/S-8</b>	Fire Officer I Fire Instructor I Fire Inspector I Airport Firefighter HAZMAT Technician
<b>Fire Inspector SSgt – TSgt/S8</b>	Fire Inspector II Fire Instructor I HAZMAT Awareness Public Fire and Life -Safety Educator
<b>Station Chief (3) SSgt – TSgt/S-9</b>	Fire Officer II Fire Instructor I Fire Inspector I Incident Safety Officer HAZMAT Incident Commander Airport Firefighter

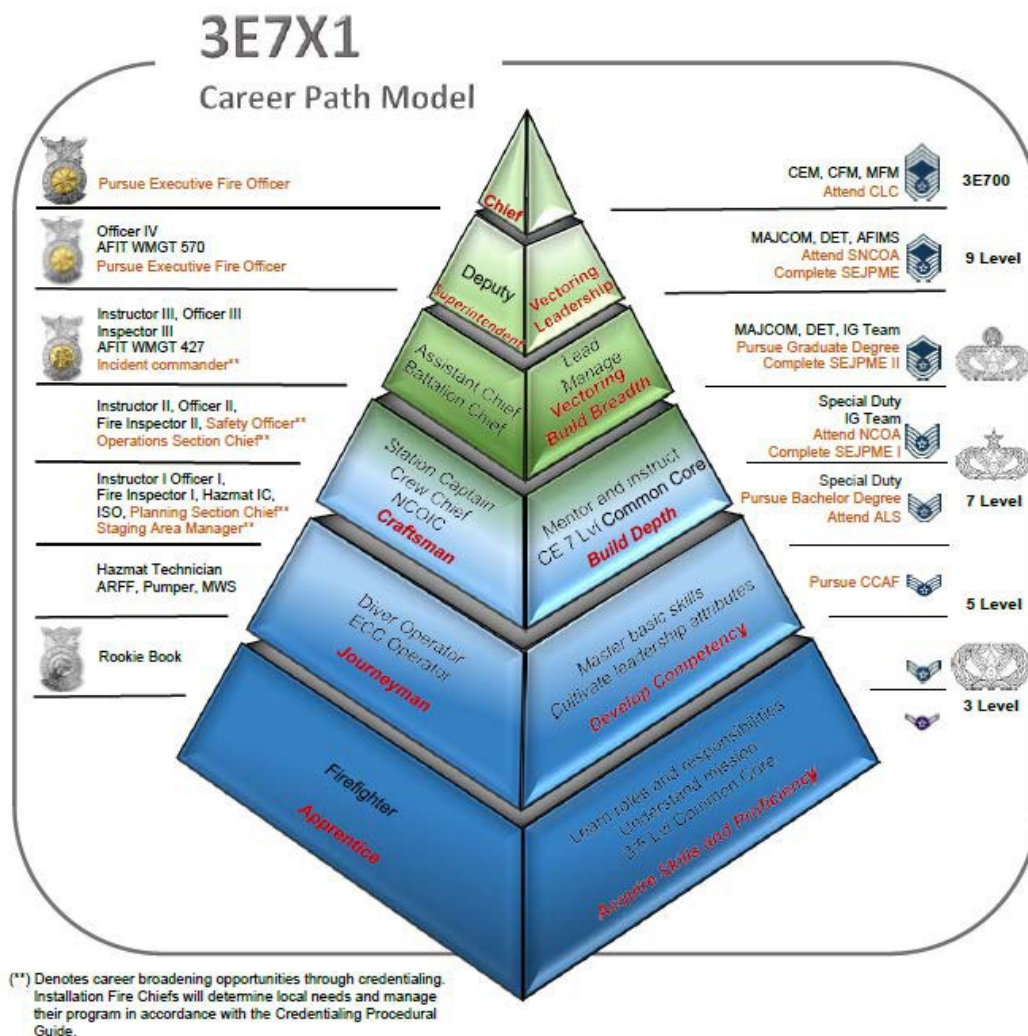
<b>Assistant Chief for Operations</b> <b>TSgt – MSgt/S-10</b>	Fire Officer III Fire Instructor II Fire Inspector II Incident Safety Officer ICS 300/400 HAZMAT Incident Commander Airport Firefighter
<b>Assistant Chief for Training</b> <b>TSgt – MSgt/S-10</b>	Fire Officer III Fire Instructor III Fire Inspector II Incident Safety Officer ICS 300/400 HAZMAT Incident Commander Airport Firefighter
<b>Assistant Chief for Fire Prevention</b> <b>TSgt – MSgt/S-10</b>	Fire Officer III Fire Instructor II Fire Inspector III Incident Safety Officer ICS 300/400 HAZMAT Incident Commander Airport Firefighter Plans Examiner I
<b>Assistant Chief of Health and Safety</b> <b>TSgt – MSgt/S-10</b>	Fire Officer III Fire Instructor II Fire Inspector II Incident Safety Officer Health and Safety Officer ICS 300/400 HAZMAT Incident Commander Airport Firefighter



<p><b>Deputy Fire Chief</b> <b>MSgt – SMSgt/S-11</b></p>	<p>Fire Officer IV Fire Instructor II Fire Inspector II Incident Safety Officer ICS 300/400 HAZMAT Incident Commander Airport Firefighter</p>
<p><b>Fire Chief</b> <b>CMSgt</b></p>	<p>Fire Officer IV Fire Instructor II Fire Inspector II Incident Safety Officer ICS 300/400 HAZMAT Incident Commander Airport Firefighter</p>
<p>(1) S-6/7 Firefighters should be certified to the Firefighter II and HAZMAT Operations Levels. P-3 Firefighters should be certified to the Firefighter II, Airport Firefighter and HAZMAT Operations Levels.</p> <p>(2) S-6/7 Driver/Operators should be certified to the Driver/Operator Pumper Level, Driver/Operator Pumper and ARFF Levels.</p> <p>(3) S-9 Station Chiefs should be certified to the Fire Officer III, Fire Instructor II, Fire Inspector II, HAZMAT Incident Commander Levels, and ARFF.</p>	



## Career Progression:



Per the Career Field Education and Training Plan (CFTEP), RAFM F&ES personnel utilize the Fire Emergency Services Career Pyramid as a model for career progression. The pyramid was built using a professional credential process utilized in career program development for a number of years. It is a basic concept for working up the career ladder by obtaining job experience and training at the appropriate time and place.

RAFM F&ES personnel receive both hands-on and academic training on a monthly basis in accordance with the Fire Emergency Services Training Plan and local requirements as determined by the Fire Chief. This ensures firefighters have the technical competence and proficiency in order to effectively execute mission requirements. In addition to the local training RAMF F&ES members

receive advanced certification training through Correspondence Courses, Civilian Equivalent Schools, and through the DoD Fire Academy at Goodfellow AFB, TX. It is essential that all RAFM F&ES personnel involved in training do their part to plan, develop, manage, and conduct an effective training program.

### **Credentialing:**

The Department of the Air Force (DAF) has an established policy for credentialing. The DAF seeks to attract and develop employees who possess abilities in their profession, as evidenced by credentialing. Credentialing is indicative of a workforce with strong technical skills, developed and exhibited through rigorous program of education, experience, and testing.

All personnel at RAFM F&ES are encouraged to pursue credentialing in their respective positions, whether that be Fire Officer (FO), Chief Training Officer (CTO) or Chief Fire Officer (CFO).

RAMF F&ES is currently home to the only 2 British civilian designated Fire Officers through the Commission on Professional Credentialing (CPC). One of whom, has also become a CPC Peer Reviewer for the Fire Officer designation. Having a trained Peer Reviewer on our station provides an opportunity to not only encourage personnel into pursuing their credentialing designation but also, act as a mentor and assist our staff with the application process.

Working toward, achieving, and maintaining designation:

- ❖ Highlights professional growth.
- ❖ Documents strategies for career enhancement and development.
- ❖ Demonstrate commitment to life-long learning, skill development, and community service.
- ❖ Affirms dedication to proficiency and delivery of all-hazard services to the community.
- ❖ Improves chances of being successful in hiring and promotion processes by identifying superior skill, knowledge, and leadership capabilities.
- ❖ Fosters a source of pride in the individual and encourages others to be credentialed.



### **Fire Prevention**

Our fire prevention program is the first line of defense against fires and other emergency conditions. An effective program prevents fires before they can start, ensures fire-safe facilities are constructed and maintained, and educates personnel on what to do in case of an emergency event. As the capability to manage large fires decreases, the value of effective fire prevention increases. This makes execution of the fire prevention program our highest priority. This is done through various meetings, work review board, projects working process with the project manager and assigned project construction companies.

Our Fire Prevention section is staffed with three dedicated fire inspectors who provide fire prevention inspections to the installation and to educate the members of the community in sound fire prevention practices. In addition, the prevention office performs technical reviews of building renovations and construction projects.

Program Element	Requirement	Frequency
Fire Risk Management	Survey and inspect all facilities	Annual / determine by AHJ
Plans Review	Review all military construction, sustainment/restoration and modernization, and self-help projects	As Required
Public Fire Education Programs	Provide programs that inform and educate all installation personnel on individual fire prevention responsibilities	Monthly

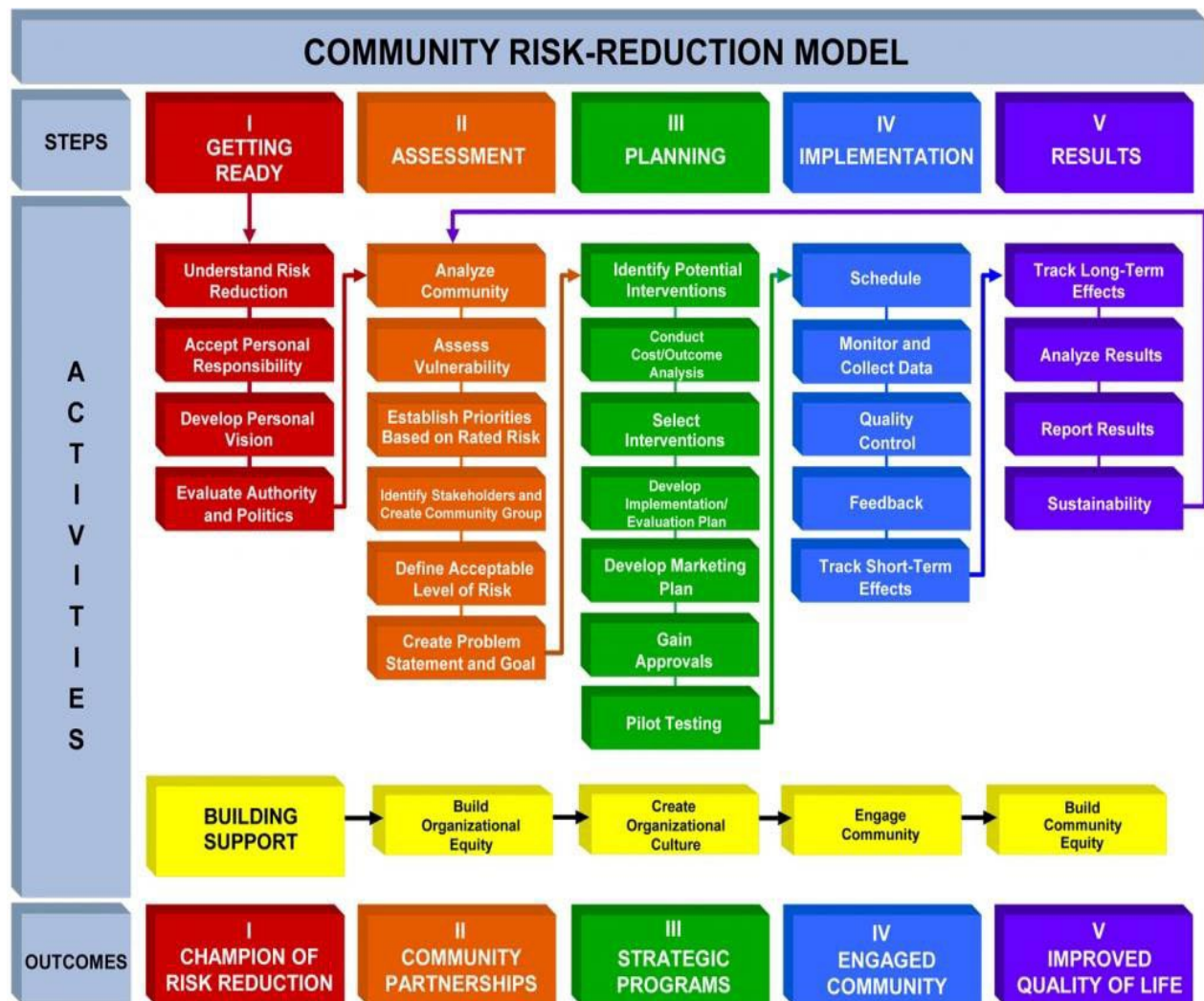
### **Community Risk Reduction (CRR) Program**

RAFM F&ES is committed to the preservation of Life and Property. The CRR program is about managing those associated risks within our community. We manage this by assessing and prioritizing risks that have been identified, developing solutions and support systems for those risks, and measuring the success of those solutions. Our objective is to continually refine solutions so that they are the most efficient and effective means to reduce or eliminate those identified risks within our community. RAFM F&ES uses the following 6-Step method when planning CRR.



The RAFM F&ES Fire Prevention addresses risk reduction on many fronts. The main focal point of our CRR Program is public education, starting at the earliest ages feasible. It also includes annual inspections of our facilities for life safety and fire hazards, and plans review processes for new building and existing construction. It includes emergency preparedness programs delivered through the 100th Civil Engineer Squadron Emergency Management (EM) Flight, and finally, it includes the continual education and implementation by fire personnel of the latest information, techniques, and programs for the prevention of injuries, and prevention of fires and reduction of property damage as a result of natural or man-made causes. When implementing our CRR Program we utilize the following methodology:





RAFM F&ES conducts a formal appraisal of the CRR/Fire Prevention program on an annual basis and is summarized when we publish our F&ES Annual Report. The Annual Report details all-inclusive summary of the past year's CRR activities, meeting of goals, objectives, and benchmarks.

### **Safety and Remediation**

With firefighter safety being our #1 priority as a department, our Safety and Remediation programs are constantly being evaluated. The Fire Prevention Section handles and documents the prevention and public education programs. The Health and Safety Section works closely with the 100th Wing Safety Office to manage injury prevention, motorcycle safety, workplace safety, and numerous high-risk activities. The department Health and Safety Section also works along with the 48th Medical Group to manage and document various public health programs such as the Firefighter Occupation Health Examination process, hearing conservation, respiratory protection, water testing and other preventable health assessments.

### **Administration**

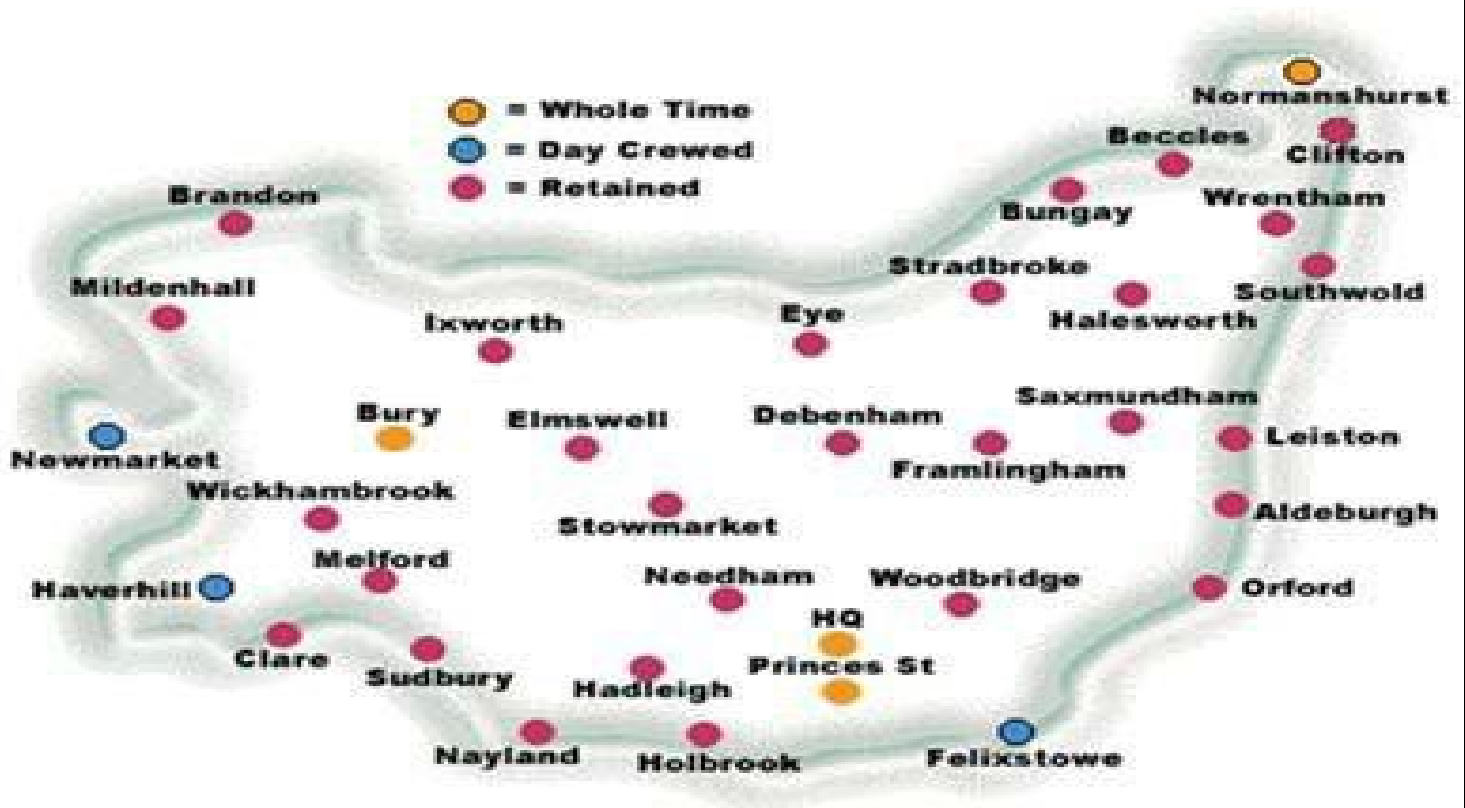
The Administrative Section of RAFM F&ES is comprised of both civilian and military personnel. The division includes the Fire Chief, Deputy Fire Chief, a LNDH (UK) Deputy Fire Chief, Assistant Chiefs of Operations, Health and Safety, and Fire Prevention, Accreditation Manager, NCOIC of Logistics and Lead Dispatcher. Personnel matters for military members are handled by the 100th Civil Engineer Squadron, Commander Support Staff/Orderly Room. The 100th Force Support Squadron, Military Personnel Flight are also available to RAFM F&ES military members to handle advanced personnel matters. UK Civilian Firefighters personnel matters are handled thru two avenues. MOD/DFRMO civilians are taken care of thru the Business Support Team (BST) and civilian pay is handled by the Defense Business Support (DBS). All LNDH personnel matters are handled thru the Civilian Personnel Office (CPO), which is all managed by the 100th Force Support Squadron.

### **Public Reception/Public Information Officer**

The RAFM F&ES promotes community relations by providing a trained and competent Public Information Officer (PIO). In the event when a PIO is required the first to perform the duties is the Installation Fire Chief. In the event of complex incidents, the Base Fire Marshall (100th Civil Engineer Squadron Commander) will assume the responsibility. RAFM F&ES can utilize its British Deputy Fire Chief to be a Liaison Officer and PIO with off-base agencies. 100th Air Refueling Wing (ARW) Public Affairs (PA) can also be called upon to augment as PIO's.

### Support Agreements

RAFM F&ES is signatory to the Suffolk & Norfolk County Fire Services through Mutual Aid Agreement. The Suffolk County Department of Fire, Rescue and Emergency Services proudly serves the county's 757,000 residents. Suffolk Fire Rescue maintains 35 fire stations and employs approximately 4,500 fire and EMS responders. Norfolk County Department of Fire, Rescue and Emergency Services serves a population of 848,400 residents. Norfolk Fire Rescue currently has 48 fire stations and employs approximately 6,000 fire and EMS responders.





#### **MUTUAL AID RESPONSE DISTRICT**

- **POPULATION 11,000 PEOPLE in Mildenhall Village; other surrounding areas include 17,000 acres that encompass Beck Row, Holywell Row, Kenny Hill and West Row for a total of 1.4M residents**
- **DIVERSE URBAN/RURAL AREAS**
- **MAJOR INTERSTATES: A11**
- **RAF LAKENHEATH: 6 Miles Away**
  - **Fighter Aircraft: F-15 C/D Eagles & F-15E Strike Eagles**
  - **Rotary Wing Aircraft: HH-60 Pave Hawk**

The closest department (Mildenhall Village) employs some of the RAFM and RAFL firefighters which enables smooth transition/operations during mutual aid calls.

#### **Closest Mutual Aid Partners**

##### **Suffolk Fire & Rescue Service**

Mildenhall Fire Station – 2 miles – ETA 5 minutes.

Brandon Fire Station – 11 miles – ETA 20 minutes.

Bury St Edmunds Fire Station – 15 miles – ETA 24 minutes.

##### **USAFE Fire & Emergency Services**

RAF Lakenheath Fire Department – 6 miles – ETA 11 minutes.

##### **Norfolk Fire & Rescue Service**

Methwold Fire Station – 17 miles – ETA 24 minutes.

Thetford Fire Station – 14 miles – ETA 20 minutes.

RAFM F&ES maintains a working relationship with the East Anglia Air Ambulance incase the need arises for air medevacs on or off- base. East Anglia is a non-profit volunteer organization and depends upon donations to sustain their capability. They are invited to our open houses and other events to extend their fund-raising base. The department has raised over 2,500 GBP for the organization to date, including a charity hike in 2022.



RAFM F&ES also receives outstanding support and assistance from the RAFL Fire Emergency Services flight located 6 miles away. Joint aircraft live fire training has been accomplished and we enjoy a great relationship with respect to assisting each other with lending tools/equipment and vehicles to each other.

### **Services Provided**

- ❖ Incident Management/Mitigation
- ❖ Emergency Communications/Dispatch
- ❖ Aircraft Fire Fighting & Rescue (ARFF)
- ❖ Structural Fire Fighting
- ❖ Emergency Medical Services (EMS)
- ❖ Hazardous Materials
- ❖ Technical Rescue
- ❖ Confined Space Rescue (CSR)
- ❖ High/Low Angle Rescue
- ❖ Petroleum Oil Liquid (POL) Spill Response
- ❖ Active Shooter/Hostile Event Response (ASHER)
- ❖ Chemical, Biological, Radiological, & Nuclear (CBRN)/Weapons of Mass Destruction (WMD)

### **Current Deployment**

In the last five years (2018 – 2022), RAFM F&ES responded to a total of 1,635 emergency incidents, including 760 structural incidents, 165 aircraft in-flight and ground emergencies, 349 medical calls, 36 Hazardous Material calls, 35 Technical Rescue calls, and 275 remote airfield standbys. Our non-fire responses are primarily structural incidents. The Fire Chief is responsible for the overall administration of the RAFM Fire Emergency Services Flight. The operating budget for the department in FY 2022 was \$424,148. The resource assignments for each service we provide have

been established to meet our stated deployment objectives. Specifically, the numbers of apparatus are identified to ensure the personnel and technical capability is available to mitigate emergency incidents.

### **Acceptability of Risk**

Due to the inherent risks and unpredictability of emergency incidents associated with fire suppression, rescue, special operations and natural disasters, Senior Fire Officers understand that all risks may not be mitigated, when this happens, risks, must be weighed against reward (desired outcome) before initiating action plans. AFCEC's Concept of Operation for Fire Prevention and Consequence Management, has changed the Air Force philosophy from risk avoidance to risk acceptance.

Although RAFM F&ES has adopted risk acceptance, we still implement policies and procedures aimed at risk mitigation. The use of an incident safety officer during emergencies and an aggressive training program are just two examples. When a known risk cannot be mitigated, RAFM F&ES will develop Operational Risk Management (ORM) plans IAW AFI 90-901, Operational Risk Management to reduce the risk to firefighters and the public at large.

As directed in DAFI 32-2001, Fire Emergency Services Program, all ORM's developed for short term, temporary, and long-term deviations from F&ES Policy will be coordinated with the appropriate base, Installation Management Command and Air Force Civil Engineer Center (AFCEC) offices.



## Community Risk Assessment

We have evaluated the call volume, type of call, and incident potential for each service we provide to the installation. This risk assessment provides the data necessary to make effective decisions that affect limited resources. Our department will target high risk elements to ensure our resources are utilized in the most efficient manner. Our department has assessed the risk through several methods. The probability and consequence for fire and non-fire risks is listed by Fire Demand Zone.

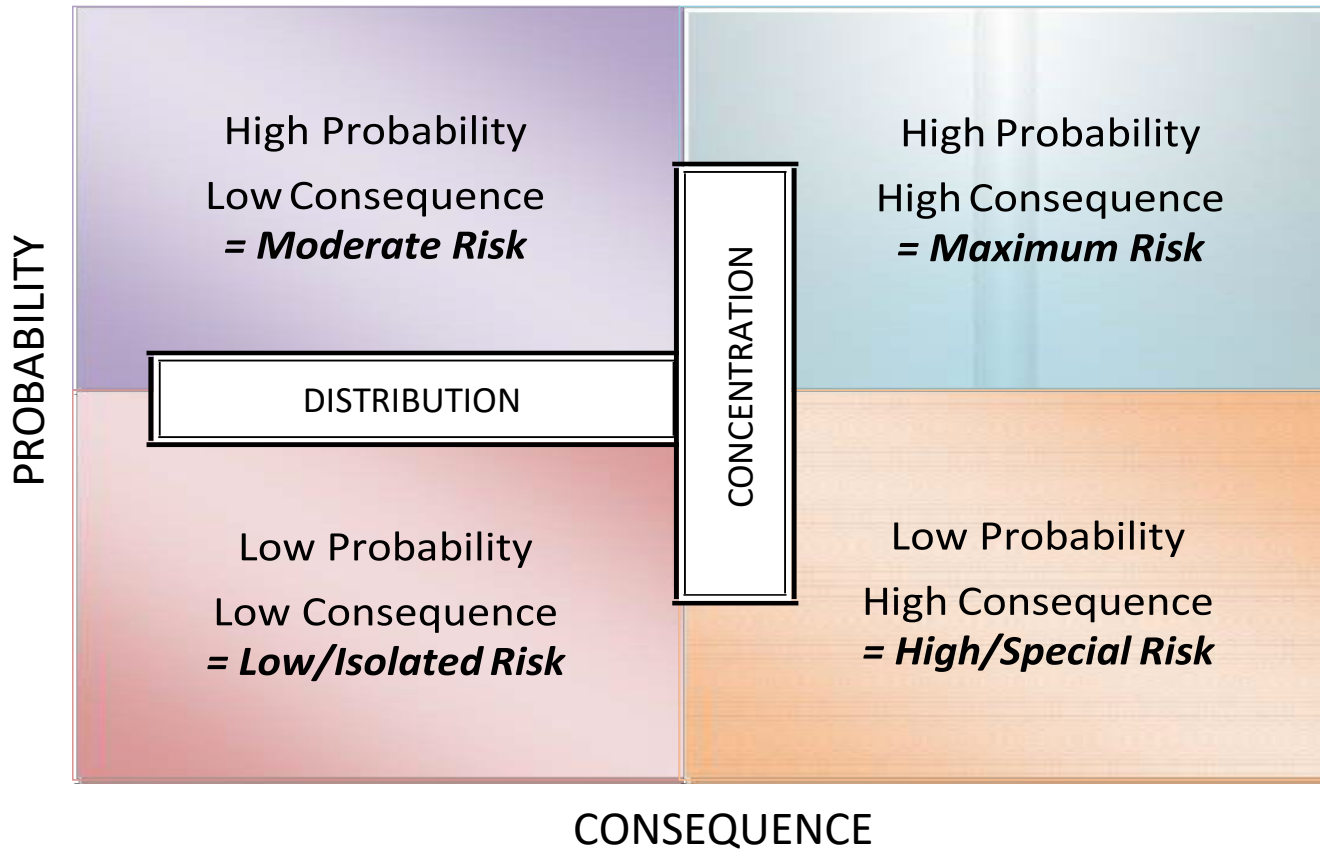
### Risk Defined

When assessing the degree of risk throughout the installation, two main elements were used. The probability and consequence of each type of incident occurring was assessed for each planning zone to develop our high-risk events. Additionally, call volume, type of activity, and existing mitigating factors were also considered when determining high risk components during the planning process. Air Force Operational Risk Management strategies were employed to identify risk during our annual assessment. Specifically, the Air Force risk model was utilized to establish an objective degree of risk to fire for all structures on RAFM. This risk assessment provides the data necessary to make effective decisions that affect limited resources. Our department will target high risk elements to ensure our resources are utilized in the most efficient manner.



*Mutual Aid Training with Firefighters from RAF Lakenheath.*

## COMMUNITY RISK ASSESSMENT METHODOLOGY



In 2023 The RAFM F&ES Flight conducted a thorough evaluation of our Community Risk Assessment. This assessment validated previous assessments using a standardized risk methodology that provides a detailed and focused look at each response type within each fire demand zone. As continual improvements are made to the installation's facilities and upgrades are made to the infrastructure the risk assessment document will be revised.

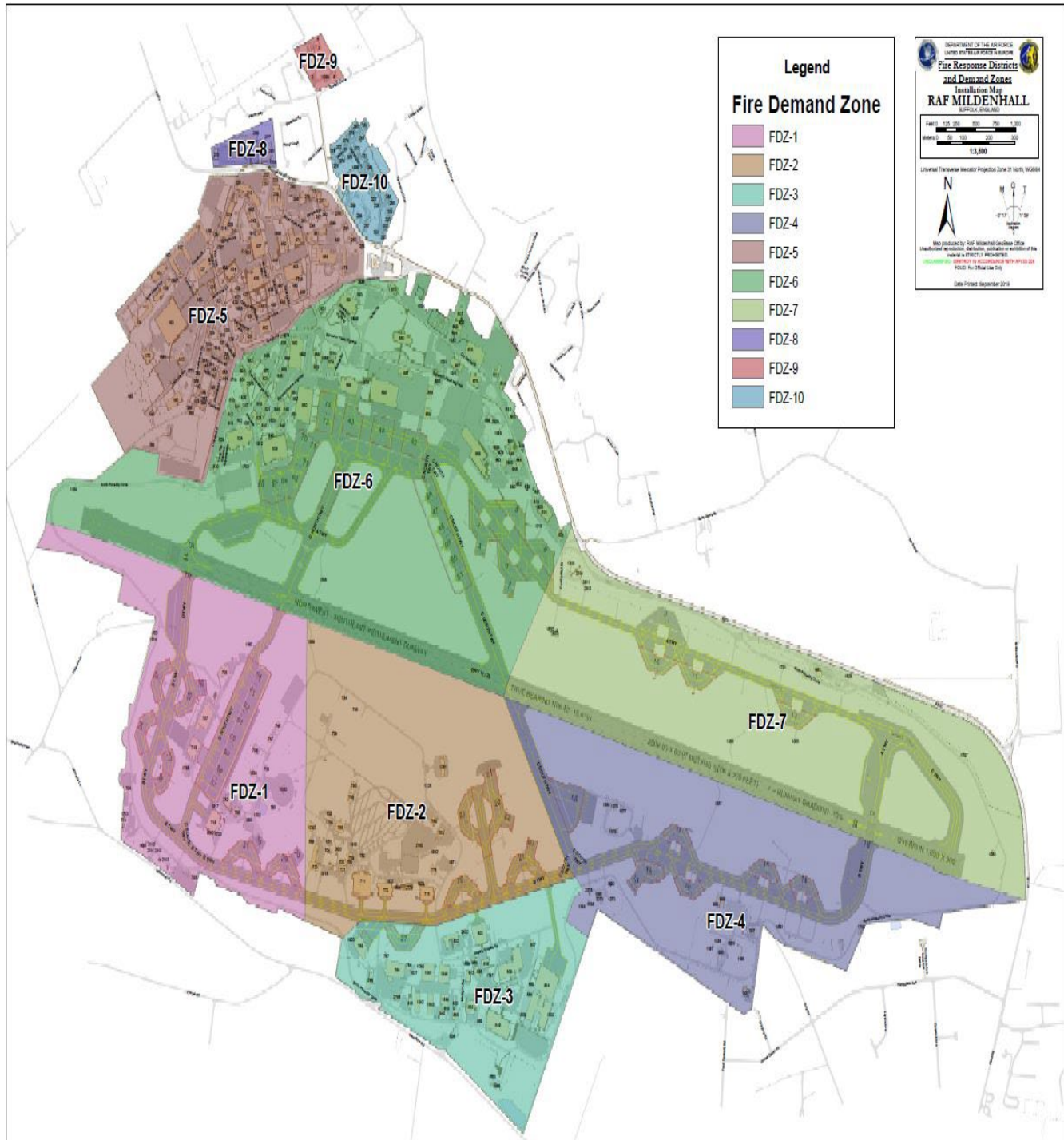
### **Fire Demand Zones**

To provide adequate coverage and response times for the entire RAFM base area, we have established 10 new Fire Demand Zones (FDZ) to permit effective risk management planning functions and enhanced distribution/concentration of our resources:

- **FDZ's 1-4 Population Density: 2K persons per Kilometer Squared**
  - **Fire Demand Zone 1: Southwest Flight Line (SOG C-130 Ramp, FD Training Grounds, 715 Fuel Cell Hangar)**
  - **Fire Demand Zone 2: South Flight Line (711 Aircraft Wash Rack, Re-fueler Truck Maintenance, CES Heavy Equipment)**
  - **Fire Demand Zone 3: South RAFM Industrial/Business Area (Hardstand Fitness Center, Hangar's 814 & 803, Hazardous Waste Yard)**
  - **Fire Demand Zone 4: Southeast Flight Line (Hardstand 65, Munitions Storage Area, PSI's, Taxiway Bravo Parking)**
- **FDZ's 5-7 Population density: 1.2K persons per Kilometer Squared**
  - **Fire Demand Zone 5: Business Area of RAFM (North of Lincoln Road)**
  - **Fire Demand Zone 6: Industrial/North Flight Line Area (Fire Dept, Command Post, Transient Ramp, CV-22 Ramp)**
  - **Fire Demand Zone 7: Northeast Flight Line Area (Taxiway Alpha, Main Gate, Transient Aircraft Parking)**
- **FDZ's 8-10 Population density: 2.9K persons per Kilometer Squared**
  - **Fire Demand Zone 8: CDC/Youth Center**
  - **Fire Demand Zone 9: CES Water Treatment Plant**
  - **Fire Demand Zone 10: Tolley Cobbled Housing Area**



## RAFM F&ES FIRE RESPONSE DISTRICTS & FIRE DEMAND ZONES



### **Water Availability**

RAFM F&ES is able to utilize a vast network of fire hydrants across the installation for fire suppression operations. There are a total of 227 hydrants installed across RAFM. Fire hydrants are placed in accordance with guidelines specified in Unified Facilities Criteria 3-600-01, Fire Protection Engineering for Facilities (UFC 3-600-01). They are tested every five years in accordance with National Fire Protection Association (NFPA) 24: Standard for the Installation of Private Fire Service Mains and Their Appurtenances, American Water Works Association guidelines and UFC 3-600-01. Water for these hydrants is supplied via a portable water system supplied by an on-base borehole and water treatment works. Inspection, testing and maintenance for the hydrants on RAFM is the responsibility of the 100th Civil Engineer Squadron Water & Fuels Systems Maintenance (WFSM) Flight. The WFSM SHOP TESTS 20% each year complete 100% after 5 years.

All inspection, testing and maintenance records are provided to the Fire Prevention Section, where it is then stored on our share drive for department personnel to view. We currently utilize one Emergency Water Source (EWS) located by Petroleum Storage Installation (PSI) Site's 5 and 6. The EWS was staged there due to the far distance to the nearest available hydrants. In the event of hydrant pressure loss or if we require additional pressure, our Fire Department Dispatch Center can contact the 100<sup>th</sup> CES Utilities Shop and they can increase the flow to the water towers to meet the required water demand.

### **Fire Risk**

The probability and consequence of fire risk as indicated for each Fire Demand Zone has been identified for RAFM during our risk analysis. Probability is the potential of an event occurring while consequence indicates the results of an event. Both factors are considered when determining the degree of risk.





Emergency Type	Fire Demand Zone 1	Consequence	Probability	Degree of Risk
	Aircraft Firefighting	High	Low	High
	Structural Firefighting	Low	Low	Low
	POL Firefighting	High	Low	High
	Munitions Firefighting	Low	Low	Low
	Waste/Dumpster Firefighting	Low	Low	Low
	Vehicle Firefighting	Low	Low	Low

Emergency Type	Fire Demand Zone 2	Consequence	Probability	Degree of Risk
	Aircraft Firefighting	High	Low	High
	Structural Firefighting	Low	Low	Low
	POL Firefighting	High	Low	High
	Munitions Firefighting	Low	Low	Low
	Waste/Dumpster Firefighting	Low	Low	Low
	Vehicle Firefighting	Low	Low	Low

Emergency Type	Fire Demand Zone 3	Consequence	Probability	Degree of Risk
	Aircraft Firefighting	High	Low	High
	Structural Firefighting	High	Low	High
	POL Firefighting	Low	Low	Low
	Munitions Firefighting	Low	Low	Low
	Waste/Dumpster Firefighting	Low	Low	Low
	Vehicle Firefighting	Low	Low	Low

Emergency Type	Fire Demand Zone 4	Consequence	Probability	Degree of Risk
	Aircraft Firefighting	High	Low	High
	Structural Firefighting	Low	Low	Low
	POL Firefighting	High	Low	High
	Munitions Firefighting	High	Low	High
	Waste/Dumpster Firefighting	Low	Low	Low
	Vehicle Firefighting	Low	Low	Low

Emergency Type	Fire Demand Zone 5	Consequence	Probability	Degree of Risk
	Aircraft Firefighting	High	Low	High
	Structural Firefighting	High	High	Maximum
	POL Firefighting	High	Low	High
	Munitions Firefighting	Low	Low	Low
	Waste/Dumpster Firefighting	Low	High	Moderate
	Vehicle Firefighting	Low	Low	Low

Emergency Type	Fire Demand Zone 6	Consequence	Probability	Degree of Risk
	Aircraft Firefighting	High	Low	High
	Structural Firefighting	Low	High	Moderate
	POL Firefighting	High	Low	High
	Munitions Firefighting	Low	Low	Low
	Waste/Dumpster Firefighting	Low	High	Moderate
	Vehicle Firefighting	Low	Low	Low

Emergency Type	Fire Demand Zone 7	Consequence	Probability	Degree of Risk
	Aircraft Firefighting	High	Low	High
	Structural Firefighting	Low	Low	Low
	POL Firefighting	High	Low	High
	Munitions Firefighting	Low	Low	Low
	Waste/Dumpster Firefighting	Low	Low	Low
	Vehicle Firefighting	Low	Low	Low

Emergency Type	Fire Demand Zone 8	Consequence	Probability	Degree of Risk
	Aircraft Firefighting	High	Low	High
	Structural Firefighting	Low	Low	Low
	POL Firefighting	Low	Low	Low
	Munitions Firefighting	Low	Low	Low
	Waste/Dumpster Firefighting	Low	Low	Low
	Vehicle Firefighting	Low	Low	Low

Emergency Type	Fire Demand Zone 9	Consequence	Probability	Degree of Risk
	Aircraft Firefighting	High	Low	High
	Structural Firefighting	Low	Low	Low
	POL Firefighting	Low	Low	Low
	Munitions Firefighting	Low	Low	Low
	Waste/Dumpster Firefighting	Low	Low	Low
	Vehicle Firefighting	Low	Low	Low

Emergency Type	Fire Demand Zone 10	Consequence	Probability	Degree of Risk
	Aircraft Firefighting	High	Low	High
	Structural Firefighting	Low	Low	Low
	POL Firefighting	Low	Low	Low
	Munitions Firefighting	Low	Low	Low
	Waste/Dumpster Firefighting	Low	Low	Low
	Vehicle Firefighting	Low	Low	Low

### **Non-Fire Risk**

The probability and consequence of each non-fire risk indicated for each Fire Demand Zone has been identified for RAFM during our risk analysis. Probability is the potential of an event occurring while consequence indicates the results of an event. Both factors are considered when determining the degree of risk.

Emergency Type	Fire Demand Zone 1	Consequence	Probability	Degree of Risk
	Emergency Medical Services	Low	Low	Low
	Hazardous Materials Releases	Low	Low	Low
	Technical Rescue	Low	Low	Low

Emergency Type	Fire Demand Zone 2	Consequence	Probability	Degree of Risk
	Emergency Medical Services	Low	Low	Low
	Hazardous Materials Releases	Low	Low	Low
	Technical Rescue	Low	Low	Low

Emergency Type	Fire Demand Zone 3	Consequence	Probability	Degree of Risk
	Emergency Medical Services	Low	High	Moderate
	Hazardous Materials Releases	High	Low	High
	Technical Rescue	Low	Low	Low

Emergency Type	Fire Demand Zone 4	Consequence	Probability	Degree of Risk
	Emergency Medical Services	Low	Low	Low
	Hazardous Materials Releases	Low	Low	Low
	Technical Rescue	Low	Low	Low

Emergency Type	Fire Demand Zone 5	Consequence	Probability	Degree of Risk
	Emergency Medical Services	Low	High	Moderate
	Hazardous Materials Releases	Low	Low	Low
	Technical Rescue	Low	Low	Low

Emergency Type	Fire Demand Zone 6	Consequence	Probability	Degree of Risk
	Emergency Medical Services	Low	Low	Low
	Hazardous Materials Releases	High	Low	High
	Technical Rescue	Low	Low	Low

Emergency Type	Fire Demand Zone 7	Consequence	Probability	Degree of Risk
	Emergency Medical Services	Low	Low	Low
	Hazardous Materials Releases	Low	Low	Low
	Technical Rescue	Low	Low	Low

Emergency Type	Fire Demand Zone 8	Consequence	Probability	Degree of Risk
	Emergency Medical Services	Low	Low	Low
	Hazardous Materials Releases	Low	Low	Low
	Technical Rescue	Low	Low	Low

Emergency Type	Fire Demand Zone 9	Consequence	Probability	Degree of Risk
	Emergency Medical Services	Low	Low	Low
	Hazardous Materials Releases	Low	Low	Low
	Technical Rescue	Low	Low	Low

Emergency Type	Fire Demand Zone 10	Consequence	Probability	Degree of Risk
	Emergency Medical Services	Low	Low	Low
	Hazardous Materials Releases	Low	Low	Low
	Technical Rescue	Low	Low	Low

### **Risk Factors**

In addition to identifying the degree of risk by planning zone, we assessed each service we provide to determine high risk elements facing our department. We have also indicated the areas identified in each Fire Demand Zone that pose a significant risk for planning purposes.

## **Aircraft**

Our installation hosts an extremely active airfield as assigned and transient aircraft flight operations are conducted seven days a week. The mission of the airfield results in over 3,000 sorties generated annually. Additionally, RAFM receives large frame military aircraft (KC-10, C-17 and C-5) delivering personnel and/or cargo. Whether it is assigned or transient aircraft each pose a different risk which results in the highest risk operations on base.

Our aircraft high risk is defined as any area with more than 35 sorties (take off/landings) per day. An announcement in 2020 that RAF Mildenhall will now not be closing also brings news of expansion plans and the relocation of KC-46a aircraft to our airbase. These plans also highlight the need for new aircraft hangars and an additional taxiway. RAFM F&ES will be closely monitoring these developments for any required changes to our response plans.

The areas identified as high risk for aircraft incidents at RAFM is as follows:

<b>Runway</b>	<b>Size</b>
<b>10/28</b>	9,206' X 200 (plus 1,000' of Overrun)

<b>Fire Demand Zone</b>	<b>Description/Aircraft</b>
<b>Fire Demand Zone 1</b>	SOG Ramp, Hangar 715 (Fuel Cell)
	MC-130J
	Assigned KC-135R/T
<b>Fire Demand Zone 2</b>	South Flightline
	Assigned KC-135R/T
	Tenant Unit RC-135S/U/T
<b>Fire Demand Zone 4</b>	Southeast Flightline, Hot Cargo Pad
	Assigned KC-135R/T
	Transient Aircraft
<b>Fire Demand Zone 6</b>	North Flightline, Transient Ramp
	CV-22 Ramp
	Transient Aircraft (C-5, C-17, KC-10, 747)
<b>Fire Demand Zone 7</b>	Northeast Flightline, Transient A/C Parking
	Transient Aircraft (KC-10, C-17, KC-135)



In Jan of 2023 we conducted an audit and found that in 2022, RAFFM had a transient ARFF Vehicle Set Category 5 aircraft on the ground 100 days and a Set 6 aircraft on the ground 20 days. This does meet the requirements described within the Vehicle Validation Re-Alignment Program (VVRP), which would justify an increase in our Aircraft Set Category and allow for additional ARFF apparatus. We will continue to monitor this to ensure that we are able to provide the highest level of protection as possible.

Specifically, we have identified locations of high risk based upon historical data of number of responses and severity of loss. Our department fully supports the wing mission and its high-risk level by providing levels of service based upon vehicle agent quantity and staffing. RAFFM is categorized as ARFF Vehicle Set Category 4 base and NFPA 403 Airport Category 8. Below are the levels of service provided regarding staffing and agent quantity per the Air Force NFPA 403 Technical Implementation Guide:

- Optimum Level of Service (OLS) staffing is 16 firefighters: 8,000 – 7,780 gallons.
- Reduced Level of Service (RLS) staffing is 15-8 firefighters: 7,779 – 4,364 gallons.
- Critical Level of Service (CLS) staffing is 7 firefighters: 4,363 – 1,732 gallons.
- Inadequate Level of Service (ILS) staffing is 4 or less firefighters; less than or equal to 1,731 gallons.



### **Structural**

The predominant cause of structural responses remains to be automatic fire alarm activations. Our department continues to evaluate the cause of false alarms and coordinates with the alarm system technicians to eliminate alarm malfunctions. We use several methods to determine the degree of risk a structure poses to our community. The Air Force Civil Engineer Center (AFCEC) has provided us with the Facility Risk Assessment Module access program as our risk evaluation tool to assess structural risk for RAFM. All facility data is input into the database and a "Facility Risk Score" is calculated. The risk score categories are as follows: Low < 20, Medium  $\geq 20$  but  $\leq 29$ , high > 30.

High Risk Facility Listing				
Risk Score	Fire Demand Zone	Building Number	Address	Occupancy Type
40				
	FDZ 5	436 - MPF/Dining Facility	Indiana Rd	Mixed
38				
	FDZ 5	464 - Middleton Hall	Carolina Road	Mixed
37				
	FDZ 5	464 - Middleton Hall	Carolina Road	Assembly
35				
	FDZ 5	108 - Dormitory	New Jersey Ave	Residential
	FDZ 3	814 - Hangar	West of S. Perimeter Road	Industrial
33				
	FDZ 5	239 - Wing Head Quarters	Carolina Road	Business
32				
	FDZ 5	224 - Dormitory		Residential
31				
30				
	FDZ 5	105 - TLF	New Jersey Ave	Residential
	FDZ 5	238 - Lodging	Caneberra St	Residential
	FDZ 5	425 - Library	Arizona Rd	Business

Medium Risk Facility Listing				
Risk Score	Fire Demand Zone	Building Number	Address	Occupancy Type
29				
	FDZ 5	210 - Dormitory	Carolina Rd	Residential
	FDZ 6	528 - AGE MXS	Texas Ave	Industrial
	FDZ 6	550 - LRS/SOG	Maine Ave	Storage
	FDZ 6	669 - FD, Base Ops, Control Tower	New York Ave	Mixed
28				
	FDZ 6	1196 - PSI North	Alpha Taxiway	High Hazard
	FDZ 7	1310 - PSI 9	New York Ave	High Hazard
	FDZ 8	288 CDC	Shippea Hill Rd	Educational
	FDZ 5	425 - Library	Arizona Rd	Business
	FDZ 5	437 Galaxy Club	Carolina Rd	Assembly
	FDZ 5	474 Chapel	Carolina Rd	Assembly
	FDZ 6	615 - Fuel Station	New York Ave	Industrial
	FDZ 4	1195 - PSI 5	South Perimeter Road	High Hazard
	FDZ 4	1197 - PSI 6	South Perimeter Road	High Hazard
	FDZ 4	1198 - PSI 7	South Perimeter Road	High Hazard
	FDZ 4	1273 - PSI 8	South Perimeter Road	High Hazard
	FDZ 1	1404 - PSI 10	South Perimeter Road	High Hazard
	FDZ 1	719 LRS - Warehouse	Delta Taxiway	Storage
27				
	FDZ 7	1055 - Localizer	East Perimeter Rd	Industrial
	FDZ 5	215 - Dormitory	Georgia Ave	Residential
	FDZ 5	237 - Lodging	Caneberra Rd	Residential
	FDZ 6	599 - Freight Terminal	Maine Ave	Mixed
	FDZ 6	610 - Vehicle Maintenance	New York Ave	Assembly
	FDZ 6	645 - SFS Ops	New York Ave	Business
26				
	FDZ 4	1378 - MSA	Bravo Taxiway	High Hazard
	FDZ 8	293 - Youth Center	Shippea Hill Road	Educational
	FDZ 5	479 - VOQ	Carolina Rd	Residential
	FDZ 2	732 - Fuel Station	Bravo Loop	Industrial
	FDZ 4	1376 - MSA	Bravo Taxiway	High Hazard
	FDZ 4	1377 - MSA	Bravo Taxiway	High Hazard

25				
	FDZ 5	104 - TLF	New Jersey Ave	Residential
	FDZ 7	1063 - Localizer	Hardstand 12	Industrial
	FDZ 6	1154 - Localizer	West Perimeter Rd	Industrial
	FDZ 5	404 - Bob Hope	Indiana Rd	Assembly
	FDZ 6	539 - CV-22 Hangar	Texas Ave	Mixed
	FDZ 7	622 TACAN Station	Alpha Taxiway	Industrial
	FDZ 1	1163 Glidescope	Taxiway D South	Industrial
	FDZ 3	768 SOG Buildup	South Perimeter Rd near Gate 10	Mixed
	FDZ 3	849 Hardstand Gym	South Perimeter Rd	Business
24				
	FDZ 5	478 - VOQ	Carolina Rd	Residential
	FDZ 6	591 - Command Post	Maine Ave	Business
	FDZ 2	711 - Hanger		Industrial
23				
	FDZ 3	1541 - 95th RS	Michigan Ave	Mixed
	FDZ 5	231 - Housing Office	Canberra St	Business
	FDZ 5	296 - Auto Hobby	Carolina Rd	Industrial
	FDZ 5	460 - Family Support	Kansas Road	Business
	FDZ 5	463 - Main Gym	Carolina Rd	Business
	FDZ 6	678 - Generator	New York Ave	Industrial
	FDZ 6	680 - CES Squadron	Maine Ave	Business
	FDZ 1	708 - LOX Plant	South Perimeter Rd	Assembly
	FDZ 3	769 - Hanger	Bravo Taxiway	High Hazard
	FDZ 4	797 - POL Shop	South Perimeter Rd, near PSI 5	Assembly
	FDZ 3	809 - Squadron Ops	South Perimeter Rd	Business
22				
	FDZ 5	163 - BXTra	Carolina Rd	Mercantile
	FDZ 5	427 - Education Office	Oregon Rd	Mixed
	FDZ 6	507 - Storage	Texas Ave	Storage
	FDZ 6	604 - CE Self Help	New York Ave	Mixed
21				
	FDZ 6	168 - Thrift Store	Dakota Rd	Mercantile
	FDZ 9	2 - Waste Water	Shippea Hill Rd	Assembly
	FDZ 5	229 - Guard Shack	Shippea Hill Rd	Business
	FDZ 5	240 - Auto Hobby	Carolina Rd	Industrial
	FDZ 5	435 - Civ Personnel	Montana Rd	Business
	FDZ 5	442 - Arts and Craft Center	Ohio Ave	Business
	FDZ 6	544 - Lodging Maintenance	Maine Ave	Business

	FDZ 6	607 - CE Electric Shop	New York Ave	Business
	FDZ 6	619 - 352nd SOSS625	New York Ave	Business
	FDZ 4	1379 - MSA	Bravo Taxiway	Storage

Low Risk Facility Listing				
Risk Score	Fire Demand Zone	Building Number	Address	Occupancy Type
20				
	FDZ 5	128 - Launderette	Missouri Rd	Business
	FDZ 5	426 - TMO Office	Ohio Ave	Business
	FDZ 6	516 - Storage	Texas Ave	Storage
	FDZ 6	530 - FSS Storage	Texas Ave	Storage
	FDZ 6	554 - LRS	Maine Ave	Business
	FDZ 6	605 - CES Material Control	New York Ave	Mixed
	FDZ 6	621 - 352nd SOSS	New York Ave	Business
	FDZ 6	632 - SFS Training	New York Ave	Business
	FDZ 6	653 Vehicle Inspection	Main Gate	Industrial
	FDZ 6	675 - Vehicle Mx	New York Ave	Assembly
	FDZ 2	738 - Storage	Mid-field North East Fire Trainer	Storage
	FDZ 4	999 - CES Storage	Bravo Taxiway - Hardstand 16	Storage
19				
	FDZ 3	1543 - RUBB	South Perimeter Rd	Storage
	FDZ 5	424 - 3rd AF UK/Tax Office	Pennsylvania Ave	Business
	FDZ 5	438 - SFS/Pass & ID	Washington Square	Business
	FDZ 5	450 - FSS	Carolina Rd	Business
	FDZ 5	459 - Lodging Office	Carolina Rd	Business
	FDZ 6	564 - Stars and Stripes	Missouri Rd	Business
	FDZ 6	568 - Wing Safety	Maine Ave	Business
	FDZ 6	584 - Det 2	Maine Rd	Business
	FDZ 6	602 - Boiler House	New York Ave	Industrial
	FDZ 6	617 - Boiler House	New York Ave	Industrial
	FDZ 1	705 - CES Power Pro	Taxiway Delta South	Mixed

	FDZ 2	724 - Boiler House	Bravo Loop	Industrial
	FDZ 2	744 - 352nd Storage	Bravo Loop	Storage
	FDZ 3	840 CE Structures	South Perimeter Rd	Assembly
18				
	FDZ 5	131 - Keesler FCU	Missouri Rd	Business
	FDZ 5	180 - AAFES Dry Cleaners	Dakota Rd	Business
	FDZ 5	232 - OSI	Carolina Rd	Assembly
	FDZ 5	431 - Boiler House	Indiana Rd	Industrial
	FDZ 6	524 - Pavilion to 525	Squawking Hawk Highway	Business
	FDZ 6	546 - 352nd SERE	Maine Ave	Mixed
	FDZ 6	556 - Boiler House	Texas Ave	Industrial
	FDZ 6	574 - 25th Intel	Arizona Rd	Business
	FDZ 6	576 - CES Utilities	Texas Ave	Business
	FDZ 6	612-GOV Wash rack	New York Ave	Storage
	FDZ 6	616 - SFS Guard Mount	New York Ave	Business
	FDZ 6	631 - FSS Marketing	Texas Ave	Business
	FDZ 6	648 - SFS Storage	New York Ave	Storage
	FDZ 2	1381 - MSA	Hardstand 25	High Hazard
	FDZ 8	291 - Guard Shack CDC	Shippea Hill Rd	Assembly
17				
	FDZ 5	233 - OSI	Carolina Rd	Business
	FDZ 5	491 - Boiler House	Carolina Rd	Assembly
	FDZ 6	501 - International Law	Missouri Rd	Business
	FDZ 6	521 - SFS Investigations	Maine Ave	Business
	FDZ 6	562 - USAFE UK	The Little Skipper Boulevard	Business
	FDZ 6	583 - Storage	Maine Ave	Storage
	FDZ 6	670 - PDC	New York Ave	Business
	FDZ 4	1380-MSA	Bravo Taxiway	Storage
	FDZ 7	1701 - West Glide Scope	Perimeter Rd	Industrial
	FDZ 2	728 - POL Maint	Bravo Loop	Industrial
	FDZ 2	754 - 352nd Offices	Bravo Loop	Business
	FDZ 3	818 - CES Recycling	South Perimeter Rd	Mixed
	FDZ 3	830 - Flight Clinic	Michigan Rd	Health Care
16				
	FDZ 5	191- Her/Park R/RM	Heritage Park,	Assembly



			Restroom	
	FDZ 5	448 - Drug Testing	Kansas Rd	Business
	FDZ 6	514 - Storage	Texas Ave	Assembly
	FDZ 6	517 - Storage	Texas Ave	Storage
	FDZ 6	555 - Storage	Squawking Hawk Highway	Storage
	FDZ 6	582 - Base Supply	Texas Ave	Mixed
	FDZ 6	611 - LRS Vehicle Ops	New York Ave	Business
	FDZ 6	618 - Offices	New York Ave	Business
	FDZ 6	654 - LRS Vehicle Park	New York Ave	Storage
	FDZ 1	714 - Bird Control	Perimeter Rd	Business
	FDZ 2	730 - Storage	Bravo Loop	Storage
	FDZ 2	763 - CES Heavy Equip	Bravo Loop	Assembly
	FDZ 3	786 - 100 AGS Storage	Bravo Loop	Storage
	FDZ 9	3 - Waste Water	Shippea Hill Rd	Business
15				
	FDZ 1	1534-Rubber	Bravo Loop	Assembly
	FDZ 5	162 - Outdoor Rec	California Ave	Mercantile
	FDZ 5	428 - Legal	Oregon Rd	Business
	FDZ 5	441 - Finance	Ohio Ave	Business
	FDZ 5	447 - MOD	Kansas Rd	Business
	FDZ 6	520 - FSS Shredder	Arkansas Rd	Industrial
	FDZ 6	522 - Storage	Maine Ave	Storage
	FDZ 6	545-FSS Storage	Maine Avenue	Assembly
	FDZ 6	585 - Empty	Maine Ave	Storage
	FDZ 6	608 - CES Storage	New York Ave	Storage
	FDZ 1	704 - LOX	Perimeter Rd	Business
	FDZ 1	702 - Generator	Perimeter Rd	Industrial
	FDZ 2	756 - 352nd Storage	Bravo Loop	Storage
	FDZ 2	767 - CES Heavy Storage	Bravo Loop	Storage
14				
	FDZ 4	1199 - PSI 6 Filter	South East of Charlie Taxiway	Industrial
	FDZ 3	1543 - Rubber	South Perimeter Road	Storage
	FDZ 8	220 -Teen Center	CDC Complex	Assembly
	FDZ 7	2310 - PSI 9 Filter House	North Piccadilly Circle	Industrial

	FDZ 9	4 - Wat Sewage LAB	Shippea Hill Rd	Storage
	FDZ 5	446 - Dental Clinic	Idaho Rd	Health Care
	FDZ 6	526 - Storage	Arkansas Road	Storage
	FDZ 6	614 - Vehicle Parking	New York Ave	Storage
	FDZ 3	787 - Electrical Distro	South Perimeter Rd	High Hazard
13				
	FDZ 7	2312 - PSI 9 Generator	North Piccadilly Circle	Industrial
	FDZ 2	2774 - Fuel Pump House	South Perimeter Road	Business
	FDZ 6	506 - Storage	Texas Ave	Storage
	FDZ 6	529 - CES Lock Shop	Texas Ave	Business
	FDZ 6	575- Storage	Texas Ave	Storage
	FDZ 6	640 - SFS Storage	New York Ave	Storage
	FDZ 6	655 - Airfield Lighting	New York Ave	Business
	FDZ 6	667 - Vehicle Storage	New York Ave	Storage
	FDZ 1	798 - Airfield Lighting	Perimeter Rd	Business
12				
	FDZ 6	594 - Guard Shack	Lincoln Rd	Business
11				
	FDZ 1	2110 - PSI 10 Con RM	South Piccadilly Circle	Industrial
	FDZ 7	2311 - PSI 9 Con RM	North Piccadilly Circle	Industrial
	FDZ 6	569 - Water Pump	Texas Ave	Industrial
	FDZ 6	594 - Guard Shack	Lincoln Road	Business
	FDZ 6	613 - MOD Police	New York Ave	Mixed
	FDZ 3	844 - 100th LRS	OFF Mississippi Road	Storage
	FDZ 4	900 - SFS K9 Kennels	South Perimeter Rd	Business
10				
	FDZ 9	5 - Sew/Treat Plant	Shippea Hill Rd	Storage
	FDZ 6	639 - SFS Storage	New York Ave	Storage
9				
	FDZ 2	2763 - Heavy Equip Storage	Taxiway Bravo Access Road	Storage

## **Munitions**

Our installation has a munition storage location without any high risk's areas identified. The area of munition storage are labeled as a moderate risk due to the nature of munitions being stored and potential consequence. In accordance with our department Flight Management Guides, in the event of an emergency, the Incident Commander will make contact with munitions personnel to determine what type of munitions are involved, the Net Explosive Weight (NEW), and any other pertinent information which will be used in the size up.

The decision to fight munitions fires will be made by the Incident Commander. Due to the short amount of time, it takes for burning munitions to detonate, firefighting actions should be limited to those situations that require rescue actions. Withdrawal distances for non-essential personnel will be based on guidance from Air Force Manual (AFMAN) 91-201, Explosive Safety Standard.

<b>Fire Demand Zone</b>	<b>Description/Location</b>
<b>Fire Demand Zone 2</b>	South Flightline
Bldg 1381	Munitions Maintenance/Storage
<b>Fire Demand Zone 4</b>	South East Flightline, MSA, Hot Cargo Pad
Bldg 1380	Munitions Storage Facility
Bldg 1378	Munitions Storage Facility
Bldg 1377	Munitions Storage Facility
Bldg 1386	Munitions Storage Facility

### **Emergency Medical Services**

Our department provides response at the Emergency Medical Responder (EMR) level on RAFM which reflects the same standard for the majority of USAF installations. We respond in a support role to the primary EMS responders, 48th Medical Group. The probability and consequence of medical response risk as indicated for each fire demand zone has been identified for RAFM during our risk analysis. Probability is the potential of an event occurring while consequence indicates the result of an event. Both factors are considered when determining the degree of risk.

Fire Demand Zone	Description/Location
<b>Fire Demand Zone 3</b>	South RAFM Industrial/Business Area
Bldg 849	Hardstand Fitness Center
<b>Fire Demand Zone 5</b>	Business Area of RAFM (N. of Lincoln Road)
Bldg 463	Northside Fitness Center
Bldg 191	Heritage Park Running Track
Bldg 163	Base Exchange
Bldg 105	Temporary Lodging Facility



### **Hazardous Materials**

The hazardous materials risk involves some unknown elements within our jurisdiction; specifically, transportation of hazardous materials on base from local contractors or RAF personnel. We have consolidated our necessary equipment on our hazardous material vehicle allowing us to conduct offensive control measures.

Currently, we have seven Petroleum Storage Installation (PSI) sites on the installation, with an estimated 2 million gallons of fuel transferred each month. Based on these risks in addition to hazardous materials used to support the mission, we have identified these high-risk hazardous material locations and situations.

<b>Fire Demand Zone</b>	<b>Incident Type</b>	<b>Description/Location</b>
<b>Fire Demand Zone 1</b>		South RAFM Industrial/Business Area
Bldg 2111	Fuel Spill	PSI Site 10
Bldg 704	Release/Spill	Liquid Oxygen (LOX) Storage
<b>Fire Demand Zone 4</b>		Southeast Flightline, MSA, Hot Cargo Pad
Bldg 1195	Fuel Spill	PSI Site 5
Bldg 1197	Fuel Spill	PSI Site 6
Bldg 1198	Fuel Spill	PSI Site 7
Bldg 1273	Fuel Spill	PSI Site 8
<b>Fire Demand Zone 6</b>		North Flightline, Transient Ramp
Bldg 1196	Fuel Spill	PSI Site North
<b>Fire Demand Zone 7</b>		Northeast Flightline, Transient A/C Parking
Bldg 1310	Fuel Spill	PSI Site 9

### **Confined Space Rescue**

Our installation is supported by several confined space operations daily. Since the majority of our confined space entries are conducted by active duty and civil service employees, the installation safety office exerts authority over most confined space entries. While we did not have a confined space response during 2019, we have identified the following area as a high risk based on the number of entries per year.

<b>Fire Demand Zone</b>	<b>Description/Location</b>
Fire Demand Zone 3	South RAFM Industrial/Business Area
Bldg 769	Fuel Cell Hangar

### **High Angle Rescue**

On the installation there is no large risk of high angle rescue due to the terrain and facilities located on RAFM.

<b>Fire Demand Zone</b>	<b>Description/Location</b>
Fire Demand Zone 6	North Flightline, Transient Ramp
	RAFM Water Tower

### **Natural Disaster**

The United Kingdom has four seasons and RAFM is susceptible to a risk of flash floods, high winds, and tornado, particularly in April to August months. RAFM has received minor damage the last few years due to high wind and rain, but the potential for severe damage is available.



### **Toxic Industrial Chemicals and Materials (TIC/TIM)**

The installation has identified toxic industrial chemicals and toxic industrial materials that could impact base operations. For local considerations, the radius has been expanded to a 50-mile circumference around the base perimeter. Currently there is a Community Right to Know Act in the United Kingdom. The identified locations, sources and quantities are listed below.

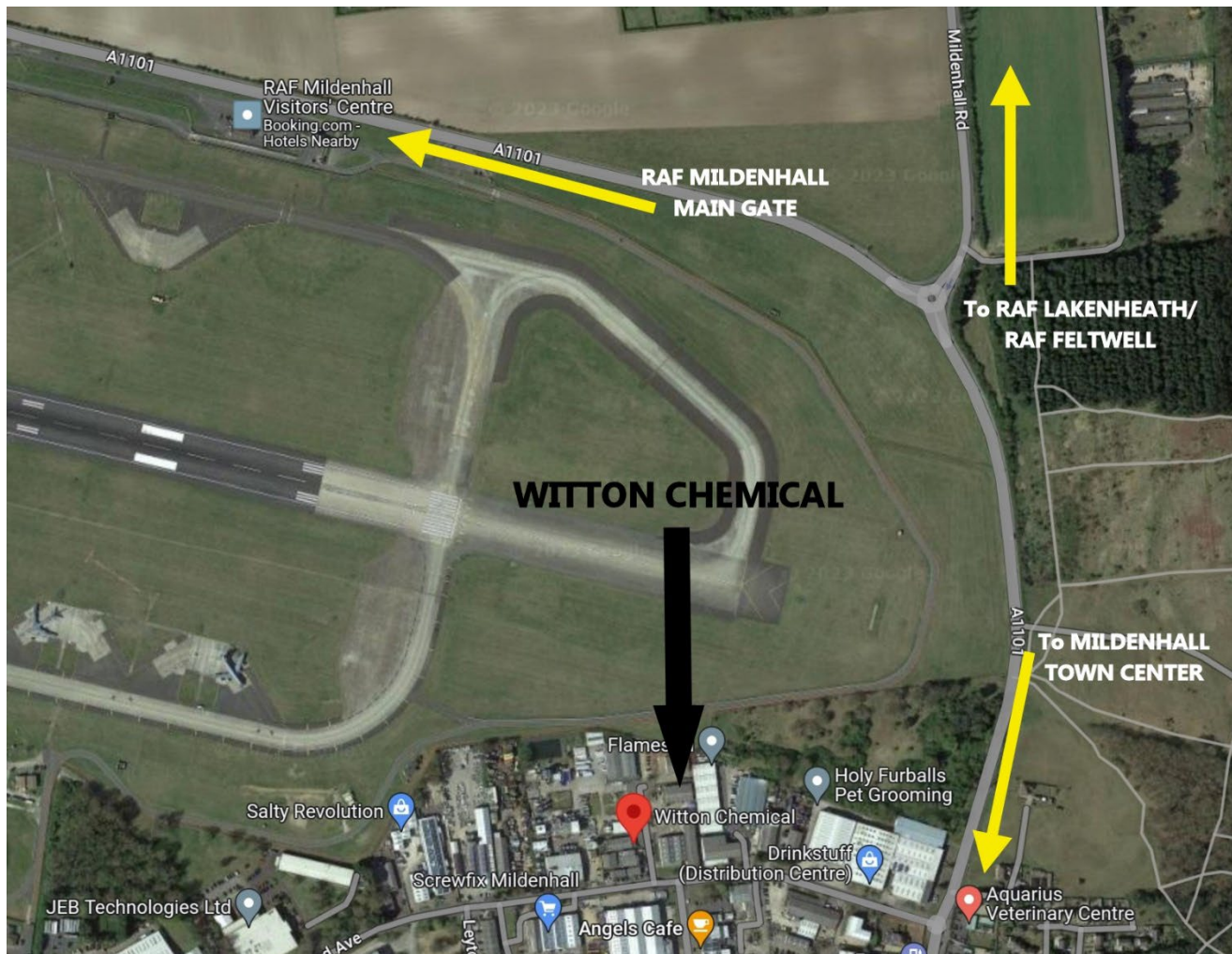
Location	TIC/TIM Source & Quantity
RAFM Water Treatment Plant (base)	Chlorine
Witton Chemical Co. Ltd	Methyl Ethyl Ketone (MEK)
Witton Chemical Co. Ltd	Acetone
Witton Chemical Co. Ltd	Toluene
Sizewell Nuclear Power Facility	Radiation



### TIC/TIM Listing

TIC/TIM	Decontamination	Respirator	Equipment
MEK	Soap & Water	SCBA/PAPR	HAPSITE, FID
Sodium Persulfate	Soap & Water	SCBA/PAPR	First Defender
Sodium Metabisulphite	Soap & Water	SCBA/PAPR	HazMAT ID, First Defender
Vinyl Acetate	Soap & Water	SCBA/PAPR	PID
Styrene	Soap & Water	SCBA/PAPR	HAPSITE, PID
Toluene	Soap & Water	SCBA/PAPR	HAPSITE, PID, Drager Tubes
Acetone	Soap & Water	SCBA/PAPR	Drager Tubes, PID
Ethyl Acetate	Soap & Water	SCBA/PAPR	PID
Sulfuric Acid	Water	SCBA Only	PH Paper
Ammonia (aqueous)	Soap & Water	Contact Hazard Only	First Defender
Glutaric Acid	Soap & Water	SCBA Only	HAPSITE
Potassium Ferricyanide	Soap & Water	SCBA/PAPR	HazMAT ID
Isophorone Diisocyanate	Soap & Water	SCBA/PAPR	HAPSITE
Chlorine	Soap & Water	SCBA/PAPR	Grey Wolf
JP-8 (Jet-A)	Soap & Water	SCBA/PAPR	Drager Tubes, PID

### Witton Chemical Company Location



Witton Chemical Company specializes in the contract manufacture of polymers and fine chemicals. Witton has warehouse storage in excess of 1000m<sup>2</sup> Indoors, whilst outside there is also a large amount of hard standing area for drums and IBCs, with a covered area available for monomer storage. For temperature dependent materials they have a 20m<sup>3</sup> heated storage at 25°C, 4x60m<sup>3</sup> heated storages at 60°C and a 20m<sup>3</sup> refrigerated storage at -15°C. Witton Chemical has over 450,000 liters of capacity for bulk storage for both raw material and finished product. They also have a 60000L bulk storage tank fitted with hot water jacket which can be heated to 85°C.

More information on the chemicals can be found here – [www.witton.com/products](http://www.witton.com/products)



## Sizewell B Nuclear Power Facility Location



Sizewell B is the UK's only commercial pressurized water reactor (PWR) power station. Its single reactor was built and commissioned between 1987 and 1995, and first synchronized with the national grid on 14 February 1995. The power station is operated by EDF Energy.

EDF's strategic target is for 20-year life extension for Sizewell B PWR, beyond the current accounting closure date of 2035. This would mean the plant remaining in operation until 2055. As of 2022, the power station is still planned to close in 2035.

In 2010 Sizewell B suffered a large fire incident. The fire broke out in the building housing a charcoal absorber which is used to filter out gases. It was brought under control 6 hours later after the charcoal absorber was flooded.

Eight fire crews attended the blaze at the power station, 48 miles from RAF Mildenhall.

## **Service Goals & Objectives**

### **Incident Response Priorities**

The department's incident response priorities are published to ensure all members are guided by common doctrine. These priorities are intended to provide a common decision point for all fire officers when faced with conflicting emergency requirements and are listed in order of precedence. Some elements can and should be conducted simultaneously with the number of standing resources available at RAFM. These elements are briefed to the installation commander. Our peacetime incident priorities are:

- ❖ Life threatening injuries regardless of location
- ❖ Incidents with wing mission impact
- ❖ Airfield emergencies
- ❖ Hazardous Materials/Weapons of Mass Destruction
- ❖ Structural emergencies
- ❖ Medical responses
- ❖ Technical Rescues

### **Service Goals and Objectives**

All response service goals and objectives are established per DoD Instruction 6055.06, which is a 90% success rate for all emergencies on all services provided. All times are represented as Aggregate Response Time (ART) which is the sum of alarm handling time, turnout time, and travel time.





### **Critical Task Analysis**

With the completion of a preliminary risk assessment of each district and fire demand zone, the department has gained a basic understanding of the magnitude of effort required to reduce each risk or to mitigate risk. To effectively respond to an identified risk or level of risk, it is necessary to understand what types of equipment and numbers of properly trained personnel are needed to mitigate each risk category for each service provided. This is accomplished through the Critical Task Analysis process. Below is a breakdown of the Critical Task Analysis for each type of emergency response.





When evaluating or analyzing critical tasks for each of the service levels, firefighter safety is our greatest concern. In developing the analysis, RAFM F&ES utilized OLS standards as the benchmark to establish staffing and equipment available for response. According to DAFI 32-2001 and DoDI 6055.06, it is assumed that only one major event will occur at a time.

Structural IRF – <b>Low + Med Risk</b>	
<b>Low and Medium Risk Facilities</b> - Investigative / Other Fire Response (Fire Alarm, Exterior Gas Leak, Dumpster/Auto Fire)	
Capability	Crew Size
Company Officer	1
Driver/Operator	1
Attack Line Firefighters (IRIT)	2
Total	4

Structural IRF – <b>High Risk</b>	
<b>High Risk Facilities</b> - Investigative / Other Fire Response (Fire Alarm, Exterior Gas Leak, Dumpster/Auto Fire)	
Capability	Crew Size
Incident Command/Safety	1
Company Officer	1
Driver/Operator	2
Attack Line Firefighters	2
Rapid Intervention Team (RIT)	2
Resupply/Sprinkler	1
Total	9

Structural ERF – All Risks	
All Facilities - Structural / Interior Gas Leak / MASS Casualty Response	
Capability	Crew Size
Incident Command	1
Safety/Accountability Officer	1
Attack Line Firefighters	2
Back Up Line	2
Search/Vent/Detection	2
Driver/Operator	1
Ladders	2
Rapid Intervention Team (RIT)	2
Total	13

EMS IRF – All Risk Levels	
Emergency Medical Services Response (BLS w/No Transport)	
Sickness/Vomiting Controllable Bleeding Falls > 6ft	Strains +Sprains Fainting/Fatigue
Capability	Crew Size
Company Officer	1
Driver/Operator	1
Patient Assessment	1
Equipment/Documentation	1
48th MDG Ambulance w/ Medics	2
Total	6

EMS ERF – All Risk Levels			
Emergency Medical Services Response (BLS / ALS w/Transport)			
<b>Med</b> <b>Respiratory Distress</b> <b>Altered Mental</b> <b>Status</b> <b>Labor</b>	<b>Med</b> <b>Seizure</b> <b>Fractures</b> <b>Burns</b> <b>Abdominal Pain</b>	<b>High</b> <b>Cardiac Arrest</b> <b>Active Shooter</b> <b>Arterial Bleeding</b>	<b>High</b> <b>Stroke</b> <b>Mass Casualty</b> <b>Non Breathing</b>
Capability		Crew Size	
Incident Command/Safety		1	
Company Officer		1	
Driver/Operator		1	
Patient Assessment		1	
Equipment/Documentation		1	
48th MDG Ambulance w/ Medics		2	
Total		7	



Haz-Mat IRF – <b>Low Risk</b>	
Haz-Mat Response ( <b>Class I Spill – Less than 2ft coverage</b> )	
Capability	Crew Size
Incident Command/Safety	1
Company Officer	1
Driver/Operator	1
Haz-Mat Technician/Haz-Mat Operations	2
Total	5

Haz-Mat IRF – <b>Med Risk</b>	
Haz-Mat Response ( <b>Class II Spill – not over 10ft in any direction, not over 50 square feet</b> )	
Capability	Crew Size
Incident Command/Safety	1
Company Officer	1
Driver/Operator	1
Haz-Mat Technician/Haz-Mat Operations	4
Total	7

Haz-Mat IRF – <b>High Risk</b>	
Haz-Mat Response ( <b>Class III Spill – Greater than 50ft or continuous in nature</b> )	
Capability	Crew Size
Incident Command/Safety	1
Company Officer	1
Driver/Operator	1
Haz-Mat Technician/Haz-Mat Operations	8
Total	11

Haz-Mat ERF – All Risks	
Haz-Mat / WMD / Suspicious Package Response / Munitions	
Capability	Crew Size
Incident Command	1
Safety/Accountability Officer	1
Operations Officer	1
Entry/Research Officer	1
Primary Entry Team	2
Back-Up Entry Team 2	2
Backup Team	2
Triage Officer	1
Decon Team	3
Decon Officer	1
Total	15

Technical Rescue IRF – Low Risk	
Elevator Rescue	
Capability	Crew Size
Incident Command/Safety	1
Company Officer	1
Driver/Operator	1
Medical Technician	1
Mechanism Operator	1
Total	5

Technical Rescue IRF – <b>Med Risk</b>	
<b>Minor + Moderate Vehicle Accident</b>	
Capability	Crew Size
Incident Command/Safety	1
Company Officer	1
Driver/Operator	1
Stabilization/Extrication	2
Rescue Equipment Operator	1
Medical Technician	1
Total	7

Technical Rescue ERF – <b>High Risk</b>	
<b>Major Vehicle Accident/Extrication</b>	
Capability	Crew Size
Incident Command	1
Safety/Accountability Officer	1
Driver/Operator	1
Back-up Handline	2
Stabilization/Extrication	2
Rescue Equipment Operators	3
Medical Technician	2
Triage Officer	1
Total	13

Technical Rescue ERF – High Risk	
High/Low Angle & Confined Space	
Capability	Crew Size
Incident Command	1
Safety Officer	1
Accountability Officer	1
Air Attendant (Monitor/Vent)	2
Primary Entry Team	2
Backup Entry Team	2
Rope Technicians/Belay	4
Total	13



ARFF IRF – Low Risk	
RAF Sculthorpe Fire Cover (Standby)	
Capability	Crew Size
Company Officer	1
Driver/Operator	1
Attack Line/ Medical Technician	1
Total	3



ARFF IRF – Low Risk	
Barrier Set-Up (Standby)	
Capability	Crew Size
Company Officer	1
Driver/Operator	1
Point Man	1
Signaler	1
Relay Signaler	1
Break Operator	1
Cable Tie Down	1
Total	7

ARFF IRF / ERF – Med + High Risk	
Aircraft Response (Inflight & Ground Emergencies / Aircraft in Hanger)	
Capability	Crew Size
Incident Command	1
Safety/Accountability Officer	1
Resupply	1
Attack Line	3
Back Up Line	3
Rescue/Ventilation	4
Rapid Intervention Team (RIT)	2
Foam Trailer Operators	2
Total	16

### **Emergency Deployment Objectives**

The performance data collected from 2018 – 2022 shows an effective distribution and concentration posture for our resources. The Department of Defense requires installations to analyze aggregate response time which is from the time of call receipt until the first arriving unit is at the scene of the reported emergency.

<u>Service Type</u>	<u>DoD Standard</u>	<u>Apparatus</u>	<u>Staffing</u>
<b>Structural</b>			
First Arriving	7:00	1	4
Full Alarm Assignment	12:00	3	13*
<b>HAZMAT/CBRN</b>			
First Arriving	7:00	1	4
Full Alarm	22:00	3	15**
<b>Emergency Medical</b>			
First Arriving (BLS w/AED)	7:00	1	2
Transport Unit (BLS w/AED)	12:00	1	2
ALS Capability	12:00	1	2
<b>ARFF</b>			
Unannounced First Arriving			
First Arriving	5:00	1	2
Full Alarm	6:00	3	6
Announced First Arriving			
First Arriving	1:00	1	2
Full Alarm	2:00	3	6
<b>Technical Rescue</b>			
First Arriving	7:00	1	4
Full Alarm	22:00	3	13

\* Requires recalled firefighters depending on number of personnel on duty

\*\* Emergency Management and Bioenvironmental Engineering personnel may be included.

## **Benchmark and Baseline Performance**

The performance data collected for the last four years shows an effective distribution and concentration posture for our resources. The Department of Defense requires installations to analyze aggregate response time (ART) which encompasses dispatch time, turn-out time, and travel time. Listed below are benchmark objectives and actual baseline performance which illustrate the department's compliance with Department of Defense and community requirements.

### **Emergency Dispatcher Performance Standards:**

The first stage of any successful emergency response is the initial processing of the emergency call. RAFM F&ES utilizes NFPA 1221 & 1710, as the benchmark standard for the emergency dispatch center.

- ❖ 95% of alarms received on emergency lines shall be answered within 15 seconds, and 99% of alarms shall be answered within 40 seconds.
- ❖ 95% of emergency call processing and dispatching shall be completed within 60 seconds, while 99% of call processing and dispatching shall be completed within 90 seconds.

Over the last five years (2018 –2022), our baseline performance for alarm handling for all emergency services was **0:58 seconds**, at the 90th percentile. In doing so, the department consistently met the requirements for alarm handling set by DoDI 6055.66 in all services provided.

### **Structural Performance**

RAFM F&ES response and deployment standards are based upon the urban population density, and the fire suppression demands of the installation. One fire station provides installation-wide coverage; department staffing is based upon station location, incident type, and frequency. The targeted service level objectives in the standards of cover benchmark statements are based on industry standards and with community expectations. The objectives have been approved and adopted by F&ES department management and the Installation leadership. RAFM F&ES benchmark service level objectives are as follows:

For 90 percent of all fire suppression incidents, the total response time for the arrival of the first due unit, staffed with 3 firefighters and 1 officer, shall be: 7 minutes in all areas. The first due unit shall be capable of: providing 500 gallons of water and 1,250 gallons per minute (gpm) pumping capacity; initiating command; requesting additional resources; establishing and advancing an attack line flowing a minimum of 150 gpm; establishing an uninterrupted water supply; containing the fire;

rescuing at-risk victims; and performing salvage operations. These operations shall be done in accordance with departmental standard operating procedures while providing for the safety of responders and the general public.

For 90 percent of all fire suppression incidents, the total response time for the arrival of the effective response force (ERF), staffed with 13 firefighters and officers, shall be: 12 minutes in all areas. The ERF shall be capable of establishing command; providing an uninterrupted water supply; advancing an attack line and a backup line for fire control; complying with the Occupational Safety and Health Administration (OSHA) requirements of two in-two out; completing forcible entry; searching and rescuing at-risk victims; ventilating the structure; controlling utilities; and performing salvage and overhaul. These operations shall be done in accordance with departmental standard operating procedures while providing for the safety of responders and the general public.

RAFM F&ES baseline statements reflect actual performance during 2018 to 2022. The department does not rely on the use of automatic aid or mutual aid from neighboring F&ES departments to provide its effective response force complement of personnel. RAFM F&ES actual baseline service level performance is as follows:

For 90 percent of all fire suppression incidents, the total response time for the arrival of the first due unit, staffed with 3 firefighters and 1 officer, is: **6 minutes and 21 seconds**. The first due unit is capable of: providing 500 gallons of water and 1,250 gpm pumping capacity; initiating command; requesting additional resources; establishing and advancing an attack line flowing a minimum of 150 gpm; establishing an uninterrupted water supply; containing the fire; rescuing at-risk victims; and performing salvage operations. These operations are done in accordance with departmental standard operating procedures while providing for the safety of responders and the general public.

The RAFM F&ES had a statistically insignificant number of fire suppression responses requiring the assembly of an effective response force for 2018-2022, to provide reliable data. Accordingly, there are no baseline service level performance statements provided for the effective response force.

(All Risk Level s) Fire Suppression - 90th Percentile Times - Baseline Performance			2018-2022	2022	2021	2020	2019	2018
<b>Alarm Handling</b>	Pick-up to Dispatch	Urban	00:57	00:58	00:58	00:57	00:57	00:55
<b>Turnout Time</b>	Turnout Time 1st Unit	Urban	00:59	01:00	00:59	01:07	00:58	00:59
<b>Travel Time</b>	Travel Time 1st Unit Distribution	Urban	04:45	04:40	05:17	04:27	04:38	04:34
<b>Total Response Time</b>	Total Response Time 1st Unit on Scene Distribution	Urban	06:21	06:01	06:51	06:08	06:04	06:04
			n=759	n=165	n=146	n=121	n=160	n=168

Note: Data is collected and averaged over the Calendar Year (1 Jan – 31 Dec)

### **Emergency Medical Service Performance**

For 90 percent of all EMS responses, the total response time for the arrival of the first-due unit, staffed with 4 firefighters, shall be: 7 minutes in all areas. The first-due unit shall be capable of: assessing scene safety and establishing command; sizing-up the situation; conducting an initial patient assessment; obtaining vitals and patients medical history; initiating mitigation efforts within one minute of arrival; providing first responder medical aid including automatic external defibrillation (AED); and assisting transport personnel with packaging the patient.

RAFM F&ES baseline statements reflect actual performance during 2018 to 2022. RAFM F&ES does not rely on the use of automatic aid or mutual aid from neighboring fire departments to provide its ERF complement of personnel. RAFM F&ES actual baseline service level performance is as follows:

For 90 percent of all EMS responses, the total response time for the arrival of the first-due unit, staffed with 4 firefighters is: **6 minutes and 28 seconds**. The first-due unit is capable of: assessing scene safety and establishing command; sizing-up the situation; conducting an initial patient assessment; obtaining vitals and patient's medical history; initiating mitigation efforts within one minute of arrival; providing first responder medical aid including AED; and assisting transport personnel with packaging the patient.

RAFM F&ES relies on our in-house Medics from the 48th Medical Group from RAFL as our BLS Transport unit for EMS responses due to the fact that RAFM has no Medical Group on the installation. The Medics from the 48th MDG complete the effective response force (ERF) component of our EMS program. The initial arriving fire department company shall have the capabilities of providing first responder medical aid including AED, until the third-party provider arrives on scene. Although we can utilize government National Health Service (NHS) ambulance support for the transport of local national civilians. They do not constitute as ERF for EMS response.

<b>(All Risk Level s) EMS - 90th Percentile Times - Baseline Performance</b>			<b>2018-2022</b>	<b>2022</b>	<b>2021</b>	<b>2020</b>	<b>2019</b>	<b>2018</b>
<b>Alarm Handling</b>	Pick-up to Dispatch	Urban	00:59	00:59	00:59	01:00	00:58	00:56
<b>Turnout Time</b>	Turnout Time 1st Unit	Urban	00:57	00:58	00:54	00:57	00:53	00:57
<b>Travel Time</b>	Travel Time 1st Unit Distribution	Urban	04:48	05:29	06:12	04:36	03:50	04:25
<b>Total Response Time</b>	Total Response Time 1st Unit on Scene Distribution	Urban	06:28	06:48	07:39	06:00	05:25	05:53
			n=349	n=58	n=55	n=62	n=89	n=85

Note: Data is collected and averaged over the Calendar Year (1 Jan – 31 Dec)

### **Hazardous Materials/CBRN Performance**

RAFM F&ES response and deployment standards are based upon the urban population density, and the hazmat demands of the Installation. One fire station provides installation-wide coverage; F&ES department staffing is based upon station location, incident type, and frequency. The targeted service level objectives in the standards of cover benchmark statements are based on industry standards and with community expectations. The objectives have been approved and adopted by F&ES department management and the Installation leadership. RAFM F&ES benchmark service level objectives are as follows:

For 90 percent of all hazardous materials response incidents, the total response time for the arrival of the first-due unit, staffed with 3 firefighters and 1 officer, shall be: 7 minutes in all areas. The first-due unit shall be capable of: establishing command; sizing up and assessing the situation to determine the presence of a potential hazardous material or explosive device; determining the need for additional resources; estimating the potential harm without intervention; and begin establishing a hot, warm, and cold zone.

For 90 percent of all hazardous materials response incidents, the total response time for the arrival of the ERF including the hazardous materials response team, staffed with 15 firefighters and officers, shall be: 22 minutes in all areas. The ERF shall be capable of appointing a site safety officer; and providing the equipment, technical expertise, knowledge, skills, and abilities to mitigate a hazardous materials incident in accordance with department standard operating guidelines.

RAFM F&ES baseline statements reflect actual performance during 2018 to 2022. RAFM F&ES does not rely on the use of automatic aid or mutual aid from neighboring F&ES departments to provide its effective response force complement of personnel. RAFM F&ES actual baseline service level performance is as follows.

For 90 percent of all hazardous materials response incidents, the total response time for the arrival of the first-due unit, staffed with 3 firefighters and 1 officer, is: **5 minutes and 47 seconds**. The first-due unit is capable of: establishing command; sizing up and assessing the situation to determine the presence of a potential hazardous material or explosive device; determining the need for additional resources; estimating the potential harm without intervention; and begin establishing a hot, warm, and cold zone.

RAFM F&ES had a statistically insignificant number of hazardous materials responses requiring the assembly of an ERF for 2018-2022, to provide reliable data. Accordingly, there are no baseline service level performance statements provided for the ERF.



(All Risk Level s) Hazmat - 90th Percentile Times - Baseline Performance			2018-2022	2022	2021	2020	2019	2018
<b>Alarm Handling</b>	Pick-up to Dispatch	Urban	00:56	00:58	01:05	00:22	00:55	00:54
<b>Turnout Time</b>	Turnout Time 1st Unit	Urban	00:58	01:09	00:56	00:23	00:56	00:56
<b>Travel Time</b>	Travel Time 1st Unit Distribution	Urban	04:18	03:36	05:14	02:38	04:03	04:20
<b>Total Response Time</b>	Total Response Time 1st Unit on Scene Distribution	Urban	05:47	05:25	06:47	03:23	05:44	05:25
			n=36	n=5	n=6	n=1	n=8	n=16

Note: Data is collected and averaged over the Calendar Year (1 Jan – 31 Dec)

### **Technical Rescue Performance**

RAFM F&ES response and deployment standards are based upon the urban population density, and the technical rescue demands of the installation. One fire station provides Installation-wide coverage; FES department staffing is based upon station location, incident type, and frequency. The targeted service level objectives in the standards of cover benchmark statements are based on industry standards and with community expectations. The objectives have been approved and adopted by fire department management and the installation leadership. RAFM F&ES benchmark service level objectives are as follows:

For 90 percent of all technical rescue incidents, the total response time for the arrival of the first-due unit, staffed with 3 firefighters and 1 officer, shall be: 7 minutes in all areas. The first-due unit shall be capable of: establishing command; sizing up to determine if a technical rescue response is required; requesting additional resources; and providing basic life support to any victim without endangering response personnel.

For 90 percent of all technical rescue incidents, the total response time for the arrival of the ERF, staffed with 13 firefighters and officers including the technical response team, shall be: 22 minutes in all areas. The ERF shall be capable of appointing a site safety officer; establishing patient contact; staging and apparatus set up; providing technical expertise, knowledge, skills, and abilities during technical rescue incidents; and providing first responder medical support.

RAFM F&ES baseline statements reflect actual performance during 2018 to 2022. RAFM F&ES does not rely on the use of automatic aid or mutual aid from neighboring F&ES departments to provide its ERF complement of personnel. RAFM F&ES actual baseline service level performance is as follows:

For 90 percent of all technical rescue incidents, the total response time for the arrival of the first-due unit, staffed with 3 firefighters and 1 officer, is: **5 minutes and 43 seconds**. The first-due unit is capable of: establishing command; sizing up to determine if a technical rescue response is required; requesting additional resources; and providing basic life support to any victim without endangering response personnel.

The RAFM F&ES did not have sufficient technical rescue incidents, which required an ERF to be assembled for 2018-2022, to provide reliable data. There are therefore no baseline service level performance statements provided for the first-due unit or the effective response force in this CRA/SOC.

(All Risk Level s) Technical Rescue - 90th Percentile Times - Baseline Performance			2018- 2022	2022	2021	2020	2019	2018
<b>Alarm Handling</b>	Pick-up to Dispatch	Urban	00:58	00:52	00:56	00:56	00:35	00:59
<b>Turnout Time</b>	Turnout Time 1st Unit	Urban	00:57	00:54	00:57	00:47	00:49	00:58
<b>Travel Time</b>	Travel Time 1st Unit <b>Distribution</b>	Urban	04:20	03:11	04:15	04:05	03:01	04:03
<b>Total Response Time</b>	Total Response Time 1st Unit on Scene <b>Distribution</b>	Urban	05:43	04:49	05:41	05:25	04:21	05:24
			n=35	n=3	n=12	n=4	n=2	n=14

Note: Data is collected and averaged over the Calendar Year (1 Jan – 31 Dec)

### **ARFF Performance**

RAFM F&ES response and deployment standards are based upon the urban population density, and the emergency medical demands of the Installation. One fire station provides Installation-wide coverage; department staffing is based upon station location, incident type, and frequency. The targeted service level objectives in the standards of cover benchmark statements are based on industry standards and with community expectations. The objectives have been approved and adopted by F&ES department management and the Installation leadership. RAFM F&ES benchmark service level objectives are as follows:

For 90 percent of all ARFF response incidents, the total response time for the arrival of the first-due unit, staffed with 3 firefighters, shall be 1 minute for pre- announced airfield emergencies and 5 minutes for unannounced airfield emergencies. The first-due unit shall be capable of: assessing the situation; requesting additional resources; controlling the hazards; and if possible, beginning basic life support of victims and hazard mitigation.

For 90 percent of all ARFF response incidents, additional companies will arrive at 30-second intervals to satisfy required firefighting agent requirements based on NFPA standards for the various aircraft sizes and categories. The ERF shall be capable of providing incident command; appointing a site safety officer; and conducting rescue operations and fire suppression in accordance with department policies and directives.

RAFM F&ES baseline statements reflect actual performance during 2018 to 2022. RAFM F&ES does not rely on the use of automatic aid or mutual aid from neighboring F&ES departments to provide its effective response force complement of personnel. RAFM F&ES actual baseline service level performance is as follows:

For 90 percent of all ARFF response incidents, the total response time for the arrival of the first-due unit, staffed with 3 firefighters, is **6 minutes and 14 seconds** for unannounced airfield emergencies. The first-due unit is capable of: assessing the situation; requesting additional resources; controlling the hazards; and if possible, beginning basic life support of victims and hazard mitigation.

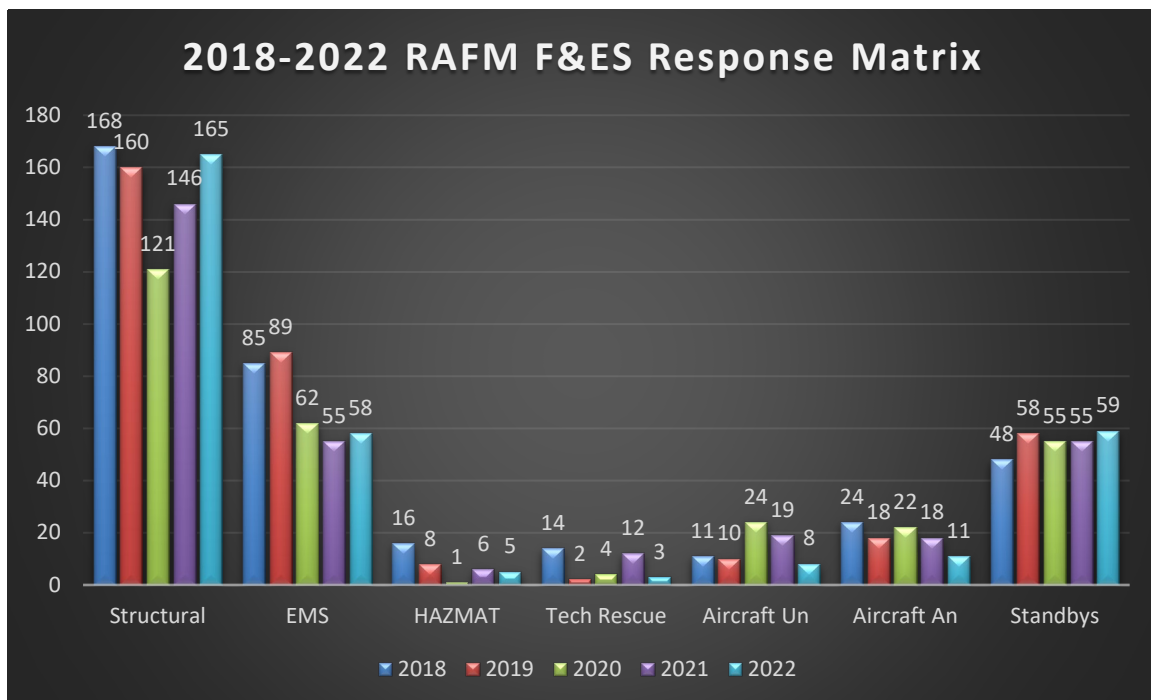
RAFM F&ES has consistently met the requirements to have additional companies arrive at 30-second intervals during emergencies, regular inspections, and training simulations during the period of 2018-2022.

(All Risk Level s) Unannounced ARFF - 90th Percentile Times - Baseline Performance			2018-2022	2022	2021	2020	2019	2018
Alarm Handling	Pick-up to Dispatch	Urban	00:59	00:58	00:55	01:07	01:00	00:51
Turnout Time	Turnout Time 1st Unit	Urban	00:59	00:57	00:59	01:00	00:48	00:55
Travel Time	Travel Time 1st Unit Distribution	Urban	04:45	04:34	04:47	04:33	04:51	02:59
Total Response Time	Total Response Time 1st Unit on Scene Distribution	Urban	06:14	06:11	06:30	06:09	06:18	05:28
			n=72	N=8	n=19	n=24	n=10	n=11

Note: Data is collected and averaged over the Calendar Year (1 Jan – 31 Dec)

### Historical Performance

The department analyzes performance monthly and uses trend analysis to search for more efficient ways to provide emergency services. The call volume for our department over the last 5 years is as follows:



**Reliability:**

Reliability study results and the examination of historical data provide an analysis of the ability to meet performance expectations even if resources are committed on an existing call for service. This necessitates a review of historical measures of performance, resource exhaustion, and expectations for future service needs.

A review of five-year historical performance (2018-2022) indicates structural and medical responses are the vast majority of organizational response activities. Analysis of emergency response data indicates dispatchers are dispatching response crews within established NFPA guidelines.

**Compliance Methodology**

To ensure continuous process improvement we have adopted the following methodology to ensure analysis, evaluation and compliance of all department policies and procedures.

**Department Documents**

Document Review			
Document	Review Frequency	Revision	POC
Flight Management Guide	Annually	Annually	Fire Chief
Community Risk Assessment/Standard of Cover	Annually	Annually	Fire Chief/ Accreditation Manager
Strategic Master Plan	Annually	5 years	Fire Chief/Accreditation Manager
Annual Report	Annually	Annually	Fire Chief/Accreditation Manager
Accreditation FESSAM	Annually	Annually	Accreditation Manager
Goals & Objectives	Monthly	Annually	Fire Chief
ORM's	Annually	Annually	Fire Chief / Fire Marshal
Mutual Aid Agreements	Annually	5 Years	Fire Chief / Dep. Fire Chief

### **Assessments and Inspections**

<b>Assessment and Inspection Schedule</b>		
<b>Type</b>	<b>Frequency</b>	<b>Responsible Agency</b>
Fire Emergency Services Self-Assessment Program (FESAP)	Annually or as Directed	FES Accreditation Manager
Staff Assistance Visit (SAV)	Annually	USAFE HQ/Wing Staff Agencies
IG Unit Effectiveness Inspection	2 Years	USAFE IG
Financial Audit	Annually	100th Comptroller Squadron
Training Audit	Annually	Squadron Unit Training Manager
Health/Safety Inspection	Annually	Wing Safety / Bio-Environmental (48th MDG)
Vehicle Maintenance Inspection	Semi-Annually	100th Logistics Readiness Squadron
Radio Communications Audit	Annually	100th Communications Squadron

### **Response Performance Objectives and Measures**

Our response performance data is reviewed at our weekly staff meeting. The Fire Chief publishes the F&ES Annual Report to department personnel showing all response data and accomplishment for that calendar year. Wing Leadership, as well as any member of the community are welcome to view this report at any time they wish. Daily Activity Reports are distributed every morning that displays all response performance in relation to the mandated standards.

## Summary

The Community Risk Assessment / Standards of Cover provides RAFM Fire Emergency Services personnel, United States Air Forces in Europe (USAFE) Command, the Air Force Civil Engineer Center, and the 100th Air Refueling Wing senior leaders with an extensive review of our capabilities. Currently, there are no significant modifications to the RAFM Mission or our responsibility for providing service.

In July 2020, it was announced that the future closure of RAF Mildenhall has now been reprieved due to the base being deemed 'critical to operational efficiency of US Forces in Europe'. Plans of a base expansion are currently being reviewed that could see the construction of new aircraft facilities and an additional taxiway along with welcoming a new squadron to our base. We will continue to evaluate the risk on the installation to ensure we are capable of providing effective emergency services delivery to our community. We will also publish our response capability and performance data monthly to the installation leadership and modify response strategies to provide the most efficient service possible. If we encounter deficiencies and cannot meet established standards, we will develop approval for a deviation through the Operational Risk Management program. The "Bloody Hundredth" Fire Department stands committed to ensuring we provide the highest quality emergency services delivery to the community we serve.

Following a detailed assessment and analysis of data accumulated over the last five years (2018 – 2022), RAF Mildenhall Fire Department has highlighted a consistent failure to reach the response time benchmark of 5:00 minutes for ARFF emergencies. In particular, it is the travel times to the Southside locations of RAF Mildenhall that are not being met. Furthermore, ARFF, EMS and Structural travel times are being missed on average by as much as 2 minutes to the Southside. Although, travel times to all responses on the Northside of installation, no matter what type of incident response are all being met successfully.

In 2021, our concerns were further acknowledged when we established and conducted a Time Trial Program across all of RAF Mildenhall's 10 demand zones. 240-time trial practice responses were executed by timing our journeys in our emergency response vehicles to the furthest facility in each demand zone. The program mirrored our emergency response findings. We met almost all our time trial responses to the Northside of the air base, but we failed to meet any of the travel times for the Southside. RAF Mildenhall F&ES has proven that the current location of our resources meets the needs of only one side of our installation and that accessing our busy flight line to reach the Southside is the common cause for delays.



In 2022, RAFM F&ES entered the planning phase for an additional fire station to be located with emergency response resources on the Southside of RAF Mildenhall. We hope to achieve approval for this project as we strive to improve our response times across our entire installation.



NATHANIEL D. SALAS, MSgt, USAF  
Interim Installation Fire Chief

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- 2) Commission on Fire Accreditation International. CFAI Community Risk Assessment: Standards of Cover 6th Edition. Chantilly, VA: Center for Public Safety Excellence, 2008.
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- 5) Department of the Air Force Instruction 32-2001, Fire and Emergency Services Program, 28 July 2022.
- 6) Air Force Policy Directive 32-20, Fire and Emergency Services, 10 July 2018

