BY ORDER OF THE COMMANDER
22D AIR REFUELING WING (AMC)

MCCONNELL AIR FORCE BASE
INSTRUCTION

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Civil Engineer

RISK MANAGEMENT FOR AIRCRAFT RESCUE FIRE FIGHTING (ARFF) CAPABILITY AND STAFFING

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This instruction implements DoDI 6055.06, *DoD Fire and Emergency Services (F&ES) Program*, AFI 32-2001, *Fire Emergency Services Program* and Air Force Manning Standard 44F1. This management plan constitutes McConnell AFB fire risk policies when Aircraft Rescue Fire Fighting (ARFF) capability falls below DoD and Air Force standards and the manning criteria for the FES flight. This plan discusses the potential risk and provides recommendations to the command structure related to fire protection resources. It addresses Optimum Level of Service (OLS) staffing levels, provides guidance to help ensure adequate fire protection during periods of Reduced Level of Service (RLS) and Critical Level of Service (CLS). Ensure that all records created as a result of processes prescribed in this publication are maintained In Accordance With (IAW) Air Force Manual (AFMAN) 33-363, *Management of Records*, and disposed of IAW with the Air Force Records Information Management System (AFRIMS) located at **https://www.my.af.mil/gcss-af61a/afrims/afrims/**. Refer recommended changes and questions about this publication to the Office of Primary Responsibility (OPR) using the AF Form 847, *Recommendation for Change of Publication*; route AF Form 847s from the field through the appropriate functional chain of command. This publication does not apply to Air National Guard (ANG) and the Air Force Reserve Command (AFRC) and their units. This publication may not be supplemented. The use of the name or mark of any specific manufacturer, commercial product, commodity, or service in this publication does not imply endorsement by the Air Force.

SUMMARY OF CHANGES

This document has been substantially revised and must be completely reviewed. Major changes include: implements updated governing directives, identifies current Core Vehicle Set for Category 4, sets and defines current Level of Service (LOS).

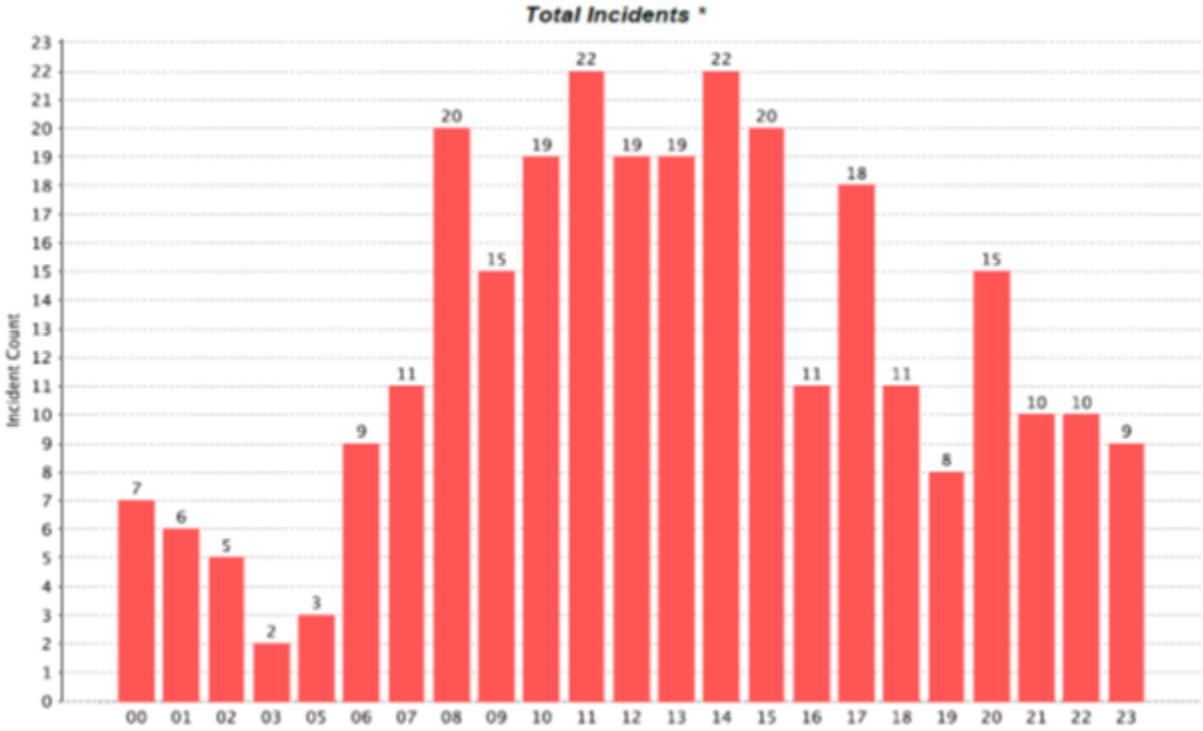
1. Requirements. DoDI 6055.06, the *Fire and Emergency Services Program* establishes the minimum requirements for firefighting agent delivery. Applying this standard to McConnell AFB, the required agent delivery for a KC-135/KC-46 is 7,780 gallons of agent to an aircraft incident occurring on the runways and overruns. In addition, DoDI 6055.06 requires an Aggregate Response Time (ART) for unannounced aircraft emergencies of 5 minutes for the first arriving ARFF vehicle. All additional ARFF vehicles should arrive at 30 second intervals thereafter, which will achieve the gallonage requirements set forth above. The ART is a total of 1 minute dispatch time, 1 minute turnout time, and 3 minutes travel time. The time is elapsed from the receipt of the emergency alarm to when the units arrive on scene.

2. Aircraft Rescue Fire Fighting Vehicles. Allowance Standard Code 010 provides the authorization for a core vehicle set that includes ARFF, structural and firefighting support vehicles for an installation. McConnell AFB is identified as a Core Vehicle Set 4 **(See Table 2.1)** for the mission assigned KC-135 and KC-46 aircrafts requiring 7,780 gallons of firefighting agent on an aircraft incident. The ARFF vehicles are assigned accordingly to deliver the required firefighting agent to an aircraft emergency site. Based on the ARFF vehicles assigned, the total ARFF agent available at McConnell is 8,500 gallons. At maximum availability, all vehicles will be placed in-service during statistically high-risk periods. **(See Table 2.2)** In this example, the period from 0700 – 1800 is the higher risk period and accounts for over 67 percent of the Air Force total emergency responses. Note that this chart represents the average responses for a year, which includes holiday periods. Considered separately, holiday periods are very low risk.

Table 2.1. Current McConnell FES Vehicle Core Set 4

ARFF Vehicles	**Quantity**	**Agent Capacity (Gallons)**
P-23	2	6,600 (3,300 each)
P-19R	1	1,500
P-34 Rapid Intervention Vehicle (RIV)	1	400
		8,500 gallons available
Structural/Support Vehicles		**Quantity**
P-22 Structural Pumper		1
P-21 Quint Ladder Truck		1
P-30 Medium Rescue		1
P-26 Water Tanker		1
Command Vehicle		2

Table 2.2. Risk Response Period



3. KC-135 /KC-46 Emergency Response Capability. Emergency Response Capability is the level of service (LOS) that can be provided with available personnel, equipment, vehicles and fire extinguishing agents. Air Force has determined that each FES flight will provide a LOS commensurate with the risk. The LOS is expressed as the Optimum Level of Service (OLS), Reduced Level of Service (RLS), Critical Level of Service (CLS) and Inadequate Level of Service (ILS) per AFI 32-2001. The ARFF capabilities fall into one of these four LOS. The levels explained below and the (**Attachment 2, Table A2.1 ARFF Capability Matrix**) was developed to aid commanders in making operational decisions when ARFF capability is degraded.

3.1. OPTIMUM Level of Service. ARFF capability is at or above 7,780 gallons of agent required for a Vehicle Set 4. The FES flight can support all airfield operations including aircrew rescue and interior fire fighting operations.

3.2. REDUCED Level of Service. ARFF capability is between 7,779–4,364 gallons of agent required for a Vehicle Set 4. This level of FES capability exceeds the critical but is less than the optimum level of service. During this level, adequate firefighting capability can be provided by utilizing selective response and adjusted fire ground tactics. During RLS, fire fighting forces can expect success when all fire fighting agent is available and the fire is limited to one location. However, initially responding firefighters may not be able to sustain emergency operations without supplemental resources. The Air Force considers operating at RLS to be a normal day-to-day situation.

3.3. CRITICAL Level of Service. ARFF capability is below 4,363 gallons of agent required for a Vehicle Set 4. CLS is the absolute minimum LOS and should only be allowed for short durations. Operating at CLS continuously for periods of more than 72 hours is prohibited

without a written RM plan signed by the installation or wing commander. For aircraft fires, fire fighting forces can provide initial fire suppression operations when at least one ARFF vehicle is available, the fire is limited to one location, the fire does not involve the aircraft's fuel system and aircrew may be required to perform self-rescue. Under Critical Level of Service, firefighters are expected to revert to defensive operations. Property involved is expected to be severly damaged. Consider curtailing aircraft launches to high priority missions only. Curtail or consider stopping aircraft maintenance activities through consultation with the Installation Fire Chief (IFC). Extremely high probability firefighting will be limited to defensive operations only. Consider issuance of NOTAM detailing lack of effective airfield firefighting capabilities.

3.4. INADEQUATE Level of Service. ILS is when Emergency Response Capability (ERC) for a CLS is unavailable. The property involved in the fire is expected to be destroyed.

4. Influencing Factors. Three factors impact the flight's ability to provide Aircraft Rescue Fire Fighting capability: Manning, ARFF vehicle availability and emergency response to non-aircraft related emergencies.

4.1. Air Force Manning Standard 44F100. Manpower required for fire operations is based on historical response data and on risk assumptions that major incidents involving real property, hazardous materials, emergency medical responses, confined space rescue, and aircraft will not occur simultaneously (except when they are involved in the same incident).

4.1.1. Personnel Qualifications. The FES must have personnel with the correct qualifications to provide the required ERC at an incident. DODI 6055.06 requires specific training and certification for each functional position on an incident prior to a person performing their role. This may include proper vehicle licensing, skill level (3, 5, 7 or 9-level) and firefighter certifications (i.e. Driver Operator-ARFF, Fire Officer III, Rescue/Confined Space/Hazardous Materials Technicians, Incident Commander, AFIMS, etc.). Cross-staffing levies additional requirements on individuals which may not be filled with new or less experienced personnel. The proper mix of firefighters is required and directly affects the ARFF capability and LOS provided.

4.1.2. Mobility Requirements. All FES military positions are assigned to a Prime Base Engineer Emergency Force (BEEF) unit type code (UTC) position, i.e. 4FPFP, 4FPFJ or 4FPFN. A large number of firefighters may be tasked for deployments which could significantly affect the LOS. **(See Table 3.1)**

Table 3.1. McConnell FES Mobility Teams for AEF Teaming

Period 3	Period 6	Unassigned global combatant commander support
(4) 4FPFP UTC 24 Firefighters	(4) 4FPFP UTCs 24 Firefighters	(1) 4FPFJ UTC 2 Senior Firefighters
(1) 4FPFN UTC 1 Senior Firefighter		

4.2. ARFF Vehicles. The highest priority must be placed on maintaining ARFF vehicles in commission to achieve the 7,780 gallon agent delivery requirement for the KC-135/KC-46. Force Activity Designator codes for fire fighting vehicles will be equal to the flying mission or highest mission being supported.

4.3. Non-Aircraft Related Emergencies. In addition to aircraft related emergencies, there are three basic and distinct emergency response protocols that we must follow and provide manpower for, when called upon for service. They are structural fire fighting response, emergency medical responses, vehicle and confined space rescue and hazardous materials mitigation. Each protocol requires that a distinct number of personnel be present to operate equipment in order to perform various tactical functions safely and effectively. Due to cross-staffing, this poses the potential for degrading ARFF manning capability **(See Attachment 3, Table A3.1 Fire Ground Operations**).

5. Staffing.

5.1. Applying DoDI 6055.06 and AFI 32-2001 directives, staffing requirements to assigned ARFF apparatus requires the optimum of 16 personnel on-duty for a KC-135 or KC-46 aircraft incident. The combined effects of TDY's, deployments, sick leaves and other factors frequently lower the number of available firefighters. Based on firefighter availability, efforts are utilized to maintain staffing levels at the Optimum Level of Service. **(See Table 3.1)** Staffing within this range meets DoDI 6055.06 directives and is preferred. Decreases to staffing levels disrupt required fire protection support functions (Training, Fire Prevention, etc.), and may cause additional overtime payments or the canceling leave/days off.

Table 4. McConnell FES Authorizations

Flight Positions	
Fire Chief	1
Deputy Chief	1
Assistant Chief for Training	1
Assistant Chief for Fire Prevention	1
Fire Prevention/Inspectors	2F / 1U
Assistant Chief for Health & Safety	1
Fire Alarm Communication Center	4F / 1U
Operations (24-hour operations)	50F / 1U
Total	64*

Operation Section Breakdown	
Firefighters Assigned (per shift)	25
Kelley Day/Regular Days Off	- 3
Leave	- 2
Mobility/Contingency TDYs, Formal Training, Convalescent or Sick Leave and Appointments (PHA, M-16, Dental, etc.)	- 3
Total Remaining	17

* 61 funded authorizations per Unit Manning Document.
64 total authorizations (3 unfunded)

5.2. This plan addresses manning at three levels: RLS, CLS and ILS. Reduced manning levels provide less than an adequate work force to fully staff assigned firefighting equipment and the capability to meet mission support requirements (**see Attachment 4, Table A4.1 FES Manning Chart**). Reduced manning levels place increased reliance on vehicle cross staffing and Mutual Aid support. The probability of fire occurrence is no higher while manning is at reduced levels; however, the probability of fire loss increases significantly as vehicle availability and manning decrease and the time to respond to a fire increases. Reduced manning increases the risk to life

and mission assets. Critical manning poses an extreme risk. Insufficient staffing will have a negative impact on any fire incident.

5.2.1. Reduced Level of Service. Operations section staffed between 15 to 12 personnel on-duty. At reduced levels of manning, interior fire attack/rescue operations will be dependent on current staffing qualifications. The IFC allocates resources according to local risk factors with the goal to provide the highest feasible level of service during high risk periods and reducing capabilities when risk is lower. In essence this is the ability for the FES flight to have the proper mix of qualified firefighters as identified in section 4.1.1. The inability to mount an aggressive interior fire attack due to insufficient manpower presents the potential of losing the entire aircraft and aircrew if they are unable to perform self-rescue. Firefighter safety may be compromised due to lack of an independent Incident Safety Officer, which is identified as a critical core fire ground task under the current 44F100.

5.2.2. Critical Level of Service. Operations section staffed at 11 to 7 personnel on-duty. Successful outcomes can only be expected when the incident can be quickly mitigated. Firefighters are expected to revert to defensive operations when the emergency cannot be quickly contained. This level of service represents limited rescue capability and increased risk/loss potential due to limited resources. Therefore, operating at CLS continuously for periods of more than 72 hours is prohibited without a written RM plan signed by the installation or wing commander. Based on the extreme risk, the Wing Commander may consider reducing flying and maintenance activities and diverting in-flight emergencies after consultation with the IFC.

5.2.3. Inadequate Level of Service. Operations section staffed at 6. Manning at this level, even with maximum cross staffing this level does not meet minimum DoDI 6055.06 directives. It requires parking fire vehicles to maintain manning on others. It does not provide an adequate work force to perform extensive fire ground operations. Probability for loss of life due to inadequate rescue forces is high and property involved is expected to be destroyed. Based on the extreme risk, the Wing Commander should consider reducing flying and maintenance activities and diverting in-flight emergencies after consultation with the IFC. Firefighter safety will be compromised.

6. Interim Staffing Measures.

6.1. During contingency operations, civilian furlough actions or any other event that reduces fire protection manning below the Optimum Level of Service, the following actions will be accomplished at the IFC or designated representatives' discretion:

6.1.1. Use overtime for civilian employees. (if applicable)

6.1.2. Assign military fire protection support (8 hours) personnel to operations section.

6.1.3. Curtail military days off.

6.1.4. Reduce the number of personnel in the McConnell Emergency Communications Center.

6.1.5. Postpone leaves.

6.1.6. Reschedule schools and other TDY's.

6.1.7. Request manning assistance through Air Force Installation and Mission Support Center (AFIMSC), Emergency Service Program Manager, Detachment 9/CEX/PSK, Scott AFB IL

6.2. The FES support functions impacted are critical to the long-term health of the fire prevention and training programs. Additionally, the actions outlined can hurt the morale and quality of life of firefighters, indirectly degrading the fire protection mission. Long-term use of these interim measures should be avoided if at all possible.

6.3. Daily fire protection flight on-duty manning below the Optimum Level of Service for extended periods of time should be seen by the McConnell AFB leadership as a critical impact to mission performance and an increased risk to life safety of all 22 ARW, 184 WG, and the 931 ARW members.

6.3.1. During high risk periods should manning fall below the OLS and above the CLS as defined in **paragraph 5.2**, the Assistant Chief for Operations will follow the interim measures stated above in **paragraph 6** with approval from the IFC.

6.3.2. RLS capability must be maintained at all times. Whenever RLS capability cannot be continuously provided, resources shall be allocated to provide increased capability. Operating below RLS at CLS continuously for periods of more than 72 hours must be approved by the Installation Commander.

6.3.2.1. Short-Term Deviations. Short-term deviations are caused by immediate unavoidable circumstances that reduce capability below the RLS or situations that cause a deviation from the requirements of DoDI 6055.06 or other FES policy for less than 90 days continuously. Short-term deviations are normally resolved at the IFC level.

6.3.2.2. The BFM will make appropriate notifications to inform the installation commander and AFIMSC Detachment 9/CEX Staff when CLS will not be available for any period of time within a fire district.

6.4. During holiday periods when it has been published that the airfield will be closed, no aircraft maintenance is being performed and with IFC's concurrence, manning may be reduced below the OLS personnel on-duty based on sound operational risk management principles.

7. Notification.

7.1. The McConnell Emergency Communications Center (MECC) operator will take immediate action to inform the following personnel/agencies when ARFF capability falls below OLS:

7.1.1. IFC & Deputy IFC

7.1.2. Fire Marshall

7.1.3. Command Post

7.1.4. Base Operations

7.2. The Senior Fire Official (SFO) will take immediate action to ensure that the personnel/agencies listed above and AFIMSC Detachment 9/CEX are notified when the ARFF capability is at CLS.

7.3. All notifications will provide the following information on the current status of firefighting capability:

7.3.1. Current ARFF level of service capability.

7.3.2. Reason ARFF capability is degraded (i.e. insufficient manning, ARFF vehicle out of service and/or fire protection personnel committed to a non-aircraft emergency).

7.3.3. What actions are initiated to correct the deficiency.

7.3.4. The expected time that ARFF capability will be restored to normal levels.

7.3.5. The personnel/agencies listed in **Paragraph 8.1** will be notified when fire-fighting capability is restored.

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Attachment 1

GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION

References

DoD Instruction 6055.06, *DoD Fire and Emergency Services Program*, 3 October 2019

AFI 32-2001, *Fire and Emergency Services Program*, 28 September 2018

AFMS 44F100, *Fire Emergency Services Flight*, Current Edition

NFPA 403, *Standard for Aircraft Rescue and Fire-Fighting Services at Airports*, Current Edition

Abbreviations and Acronyms

AFI—Air Force Instruction

AMC—Air Mobility Command

ARW—Air Refueling Wing

ARFF—Aircraft Rescue Fire Fighting

BFM—Base Fire Marshal

DoD—Department of Defense

DoDI—Department of Defense Instruction

ERC—Emergency Response Capabilities

FES—Fire and Emergency Services

HQ—Headquarters

IFC—Installation Fire Chief

LOS—Levels of Service

MAFB—McConnell Air Force Base

MECC—McConnell Emergency Communications Center

NFPA—National Fire Protection Association

NOTAM—Notice to Airmen

Prime BEEF—Prime Base Engineer Emergency Force

Terms

Adjusted Manpower for Operations (AMO) —The total number of operations personnel needed to accomplish all fire ground tasks without multi-tasking. AMO is determined by dividing the total authorizations for operations by the manpower availability factor 2.64. The result is the number of personnel expected for duty when all authorized personnel are available. The AMO is based on typical structural and aircraft firefighting tasks.

Aggregate Response Times (ART)—The total of dispatch time, turnout time, and travel time. The time elapsed from the receipt of the emergency alarm to when the units arrive on scene.

Aircraft Rescue Fire Fighting Rescue Vehicles—P-2, P-4, P-15, P-19, P-23, P-34.

Critical Level of Service (CLS)—Firefighters are expected to revert to defensive operations when the emergency cannot be quickly contained. This level of service represents limited rescue capability and increased risk/loss potential due to limited resources. Therefore, operating at CLS continuously for periods of more than 72 hours is prohibited without a written RM plan signed by the installation or wing commander.

Fire Demand Zone (FDZ)—A specific area within a fire district that demands similar resources, tactics and strategy to manage FES events.

Optimum Level of Service (OLS)—Fire fighting forces can expect successful outcomes when a structural fire is confined to the room/area of origin, offensive fire attack operations can be initiated prior to flashover and required fire fighting vehicles are available. For aircraft fires, fire fighting forces can expect success when the fire is limited to a single aircraft and all fire fighting agent is available.

Reduced Level of Service (RLS) —This varying level of service allows adequate fire ground capability based on historic emergency response data and the most probable major fire emergency event. This level of service would be expected and acceptable when resources are not available due to various circumstances such as deployments, unfunded or unfilled manpower authorizations, leaves, etc. During this level of service, adequate firefighting capability can be provided by utilizing cross staffing, selective response and sound fire ground tactics. During this level of manning, interior fire attack/rescue operations will be dependent on current staffing qualifications. The IFC allocates resources according to local risk factors with the goal to provide the highest feasible level of service during high risk periods and reducing capabilities when risk is lower. The inability to mount an aggressive interior fire attack due to insufficient manpower presents the potential of losing the entire aircraft and aircrew if they are unable to perform self-rescue.

Senior Fire Official (SFO)—IFC; Deputy IFC; and the Assistant Chiefs of Operations, Training, Fire Prevention or Health & Safety.

Attachment 2

ARFF CAPABILITY MATRIX

Table A2.1. ARFF CAPABILITY MATRIX, Part 1

	RETURN TO MAIN PAGE	PERSONNEL STATUS	STRUCTURAL STATUS	VEHICLES IN SERVICE 3	AGENT AVAILABLE 8,100	ARFF STATUS
AF VEHICLE SET	TYPE AIRCRAFT			NFPA AIRPORT CATEGORY	AGENT REQUIRED	RISK LEVEL
6	C-5A/B			10	G: 13000 - 12626 Y: 12625 - 7508 R: < 7507	
5	E-4B (747), VC-25 (747) and KC-10A (DC-10)			9	G: 10000 - 9570 Y: 9569 - 6292 R:< 6291	
4	C-17A, B-1B, B-2, B-52H and KC-135 (707), KC-46 (767)			8	G: 8000 - 7780 Y: 7779 - 4364 R: < 4363	
	KC-46 specific requirements			8	G: 7780 - 4831 Y: 4830 - 3581 R: < 3580	
	KC-135 specific requirements			8	G: 7780 - 4172 Y: 4171 - 2922 R: < 2921	
3	C-9A/C (DC-9), C-22B, C-40C (737), T-43A (737), C-130 (All Models), C-37A, MH-53J/M, C-32A (757), E-8C (707), E-3B (707), RC-135U/V/W (707)			6 - 7	G: 5000 - 4880 Y: 4879 - 3027 R: < 3026	
2	C-20A/B/C/H			5	G: 4000 - 2760 Y: 3599 - 2000 R: < 2000	
1	T-37B, UAVs & Drones, T-38A, AT-38B/C, T-6A, UV-18, CV-22, UH-1N, C-38A, A-10, OA-10, F-16C/D, T-1A, C-21A, C-12, F-15A/B/C/D, F-15E, F-117A, F-22A, F-35A/B/C			1 - 4	G: 2500 - 1340 Y: 2249 - 1250 R: < 1250	

Aircraft Rescue Fire Fighting (ARFF) Vehicle Fleet						
REG #	Call Sign	Type	Water	Service Status	O/O/S DATE	ETIC
95L00053	Crash 3	P-23	3,300	Y		
95L00201	Crash 5	P-23	3,300	Y		
96L00044	Crash 8	P-23	3,300	N	12-Sep-19	5-Apr-20
06L00347	Crash 4	Striker	1,500	Y		
15C00106	Squad 12	RIV	400	Not Manned		
Remarks						

**Vehicle requirements supporting ARFF response capabilities*

Table A2.2. ARFF CAPABILITY MATRIX, Part 2

FIREFIGHTING PERSONNEL AVAILABLE
16

AIRFIELD FIREFIGHTING PERSONNEL LEVELS OF SERVICE																	
TASKS	OLS						RLS						CLS				
INCIDENT COMMANDER (IC)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
RAPID INTERVENTION TEAM	3	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	0
SAFETY/ACCOUNTIBILITY	2	2	2	2	2	1	1	1	1	1	1	1	1	1	0	0	0
VEH OPERATORS ARFF	4	4	4	4	4	4	4	3	3	3	3	3	3	3	3	2	2
VEH OPERATORS STRUCTURAL	3	3	2	2	2	2	2	2	2	2	1	1	1	0	0	0	1
ATTACK LINE	3	3	3	3	2	2	2	2	2	2	2	2	2	2	2	2	2
BACK UP LINE	3	3	3	2	2	2	2	2	2	2	2	2	1	1	1	1	1
TRUCK (RESCUE/VENT/MED)	4	4	4	4	4	4	3	3	2	1	1	0	0	0	0	0	0
SHIFT PERSONNEL	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7

STRUCTURAL FIREFIGHTING LEVELS OF SERVICE									
TASKS	OLS			RLS					CLS
INCIDENT COMMANDER (IC)	1	1	1	1	1	1	1	1	1
RAPID INTERVENTION TEAM (RIT)	2	2	2	2	2	2	2	2	2
SAFETY/ACCOUNTIBILITY	1	1	1	1	1	1	0	0	0
VEH OPERATORS	3	2	2	2	2	2	2	2	1
ATTACK LINE	2	2	2	2	2	2	2	2	2
BACK UP LINE	2	2	2	2	2	2	2	1	1
TRUCK (RESCUE/VENT/MED)	4	4	3	2	1	0	0	0	0
SHIFT PERSONNEL	15	14	13	12	11	10	9	8	7

Legend
OLS- Optimum Level of Service
RLS- Reduced Level of Service
CLS- Critical Level of Service

NOTE:
The numbers posted reflect the number of personnel assigned to that position

**Manning requirements supporting structural and ARFF response capabilities*

Attachment 3

FIRE GROUND OPERATIONS

Table A3.1. FIRE GROUND OPERATIONS

KC-135 / KC-46 Core Set 4				
Vehicles Required: 1–P22, 1–P21, 1–P30, 1–P26, 1–P19, 2–P23, 1–P34 (RIV)	**Risk Level**			
	OLS-Min	**RLS**	**CLS**	**ILS**
Tasks Required	**Crew Size**	**Crew Size**	**Crew Size**	**Crew Size**
Vehicle Operator	**5**	**4**	**3**	**3**
Rescue	**2**	**2**	**2**	**2**
Rapid Intervention (RIT)	**1**	**1**	**1**	**1**
Rapid Intervention (RIT)	**1**	**1**	**1**	**1**
Inside Line	**2**	**1**	**1**	**1**
Outside Line	**3**	**1**	**1**	**1**
Incident Commander	**1**	**1**	**1**	**1**
Safety Officer	**1**	**1**	**1**	*****
Accountability Officer	*****	*****	*****	*****
Total Crew Size	**16**	**15 -12**	**11**	**10**
NOTES: *** Task assumed by other requirements.**				

Attachment 4

FES MANNING CHART

Table A4.1. FES Manning Chart

Firefighters On-Duty	**16 & Above**	**15-12**	**11**	**10 & Below**
Risk	**OLS**	**RLS**	**CLS**	**ILS**
In-Flight Emergencies	Full Support	Consider Divert	Consider Divert	Consider Divert
Aircraft Maintenance, Fueling, Defueling, Fuel Cell Maintenance	Full Support	Consider Curtailing to Mission Essential Only	Consider Curtailing to Mission Essential Only	Consider Curtailing to Mission Essential Only
Meets DoD and AF Standards For Manning	Yes	Yes	Yes	No
Ability to Deliver 7,780 (KC-135/46) Gallonage Requirement for an Aircraft Incident	Yes	Dependent on staffing qualifications	No	No
Ability to Mount an Aggressive Aircraft Interior Fire Attack	Yes	Dependent on staffing qualifications	No	No
Ability to Perform On-Scene Fire Fighting Agent Resupply to Sustain a Firefighting Operation	Yes	Dependent on staffing qualifications	No	No
Increased Reliance on Mutual Aid for Structural Fire Protection	No	Yes	Yes	Yes
A number of courses of action are defined as "Consider Divert/Curtail" in this chart. For example, "diverting an in-flight emergency". The final course of action depends upon the nature of the emergency. If there is no immediate danger to the aircraft, and there is sufficient fuel to divert to an alternate military installation or municipal airport, that may be the proper course of action. On the other hand, an engine fire may necessitate an immediate landing. In that case, whatever manpower and vehicles are available would be used in an attempt to perform rescue and extinguish the fire although the risk to firefighters and aircrew would be greatly increased.				