TEXAS COMMISSION ON FIRE PROTECTION
July 15, 2021, 9:00 a.m.
1701 N. Congress Ave., William B. Travis Building, Room 1-104, Austin, Texas

The meeting of the Texas Commission on Fire Protection will be held in-person at the physical location above. If you are not feeling well or were possibly exposed to COVID-19, please stay at home.

The Texas Commission on Fire Protection may discuss and/or take action on any of the following agenda items. The Commission may go into executive session on any agenda item listed below as authorized by the Open Meetings Act, Texas Government Code Chapter 551.

1. **Call to order with invocation and pledge of allegiance.**

2. **Roll call and excuse of Commissioner absences.**

3. **Commission meeting minutes of April 29, 2021.**

4. **The Budget and Strategic Plan Subcommittee may meet on July 15, 2021, during the commission meeting and provide a report relating to any recommendations developed by the subcommittee relating to modifications to the agency operating budget and strategic plan.**

5. **Reports from fire service interest groups and agencies on matters relating to their specific organizational purposes, functions, activities, and objectives, including reports from the Texas Fire Chiefs Association, the Texas State Association of Fire Fighters, the State Firemen's and Fire Marshals' Association of Texas, the Texas Fire Marshal's Association, the Texas Association of Fire Educators, the Texas A&M Forest Service, the National Fire Protection Association, Texas State Association of Fire and Emergency Districts, the Center for Public Safety Excellence, and the State Fire Marshal's Office.**

6. **Report from commission representative to the Homeland Security Council.**

7. **Report from the Health and Wellness Ad Hoc committee.**

8. **Subjects for future commission meeting agendas.**

9. **Future meeting dates.**

10. **Matters referred from the Fire Fighter Advisory Committee (FFAC), including, but not limited to:**

    A. **Possible final adoption of the proposed amendments as follows:**

        1. **37 Tex. Administrative Code, Part 13, Chapter 421, Standards For Certification.**

        2. **37 Tex. Administrative Code, Part 13, Chapter 435, Fire Fighter Safety.**

    B. **Report from the Curriculum and Testing Committee regarding possible changes to the Certification Curriculum Manual as follows:**

        a. **Basic Aircraft Rescue Fire Suppression Curriculum**
        b. **Basic Fire Inspector Curriculum**
        c. **Plan Examiner Curriculum**

11. **37 Tex. Administrative Code, Part 13, Chapter 435, Fire Fighter Safety regarding After Action Reports for Mayday events.**

12. **37 Tex. Administrative Code, Part 13, Chapter 421, Standards For Certification regarding testing and certification requirements.**

13. **37 Tex. Administrative Code, Part 13, Chapter 441, Continuing Education regarding the review of latest TCFP injury report.**

14. **Request from the Texas A&M Forest Service for a possible rule amendment to 37 Tex. Administrative Code, Part 13, Chapter 455, Minimum Standards for Wildland Fire Protection Certification regarding online wildland training.**

15. **Review of 2020 data collected regarding fire fighter injuries and the development of recommendations to be submitted to the State Fire Marshal's Office for inclusion in its annual report.**

16. **Advisory committees including but not limited to committee make up, term limits, and meeting requirements.**

17. **Matters from the Executive Director.**

    A. **Decisions of Executive Director in contested cases and consent orders.**

    B. **Status regarding division functions:**
    a. Training Approval & Testing – test administered, training approvals, record reviews and online training audits
    b. Certification & Professional Development – training applications, IFSAC seals issued, certifications issued, training facilities, curriculum development, library resource requests
    c. Compliance – biennial inspections, compliance officers training, issues involving regulated entities
    d. Information Technology – public website design, FARM and FIDO improvements, CAPPS (Central Accounting Payroll/Personnel System), IT security policy, service requests

18. **Personnel matters regarding the appointment, employment, compensation, evaluation, reassignment, and duties of the Executive Director.**

19. **Adjourn meeting.**

Any invocation that may be offered before the official start of the commission meeting shall be voluntary offering of a chaplain, to and for the benefit of the commission. The views or beliefs expressed by the invocation speaker have not been previously reviewed or approved by the commission and do not necessarily represent the religious beliefs or views of the Council in part or as a whole. No member of the community is required to attend or participate in the invocation and such decision will have no impact on their right to participate actively in the business of the commission. Copies of the policy governing invocations and setting forth the procedure to have a volunteer deliver an invocation are available upon written request submitted to the commission Clerk.

1. **Call to order with invocation and pledge of allegiance.**

2. Roll call and excuse of Commissioner absences.

3. Commission meeting minutes of April 29, 2021.

TEXAS COMMISSION ON FIRE PROTECTION

Presiding Officer, J. P. Steelman, at 10:00 a.m. called the April 29, 2021, meeting of the Texas Commission on Fire Protection to order at 1701 N. Congress Avenue, Room 1-104, Austin, Texas.

Attending	Chris Cantu	David Coatney	Sue De Villez	Michael Glynn	Paul Hamilton
	Mike Jones	Clyde Loll	Bob Morgan	Mala Sharma	Tim Smith
	J. P. Steelman	Kelly Vandygriff	Rusty Wilson		

*absent entire meeting
**absent part of meeting

Staff	Mike Wisko	Deborah Cowan	Grace Wilson	Cliff Grant	Joyce Guinn
	Tara Youngblood	Paul Maldonado	Rosalind Hunt, Assistant Attorney General		

Guests	Pat McAuliff	Woody Dunseith	Tanner Singleton	Kevin Price	Robert Moore
	James Cone	Thomas McMonigle	Ray Hacker	Mick Moffit	Leonard Chan
	Kelly Kistner	Tony Harvey	Danny Kistner	Robert Fite	Gene Senter
	Sean Richardson	Ryan Smith	Daniel DeYear	Les Stephens	David Brannon
	Jim Reidy	Wesley Caskey	Doug Boeker	Mark Akers	Keith Gall
	James Kubinski	Ramon Coven	Jonathan Vance	Javier Crespo	Brad McCutcheon
	William Carpenter	Cameron Kraemer	Mark Piland	James Reyes	Samuel Pena
	Jonathan Lawson	Wesley Holland	Ray Fitch	Nathan Fisk	Charlie Salazar
	Glenn DeShields	Larry Miles	Daniel Arriaga	Justin Ball	Glenn Trubee
	Troy C'DeBaca	Laurie Christensen	Sam Greif	Cliff Avery	Kelly Ransdall

1.	Invocation and Pledge of Allegiance	The invocation was given by Chaplain Mark Akers and the Pledge of Allegiance was lead by Presiding Officer, J. P. Steelman.
2.	Introduction of new commissioners	Presiding Officer J.P. Steelman introduced new commissioners, Michael Glenn, David Coatney, Chris Cantu, Clyde Loll and Tim Smith.
3.	Roll call	Presiding Officer called the roll, and a quorum was present.
4.	Election of Officers	Commissioner Bob Morgan nominated Commissioner Mike Jones for Assistant Presiding Officer and Commissioner Mike Jones nominated Commissioner Bob Morgan for Secretary. No other nominations were made. Presiding Officer J. P. Steelman moved that the nominations be approved by acclimation.
5.	Adoption of Minutes	A motion to approve the minutes of the January 21, 2021, and January 22, 2021, commission meetings were made by Mike Jones and seconded by Rusty Wilson. The motion carried.
6.	Report from Budget and Strategic Plan Subcommittee	New members were appointed by the Presiding Officer to replace former members of the committee. The new members appointed were Commissioners Michael Glenn, Chris Cantu and Paul Hamilton with Commissioner Bob Morgan appointed as Chair.

7.	Reports from Interest Groups	A brief report was given by the Center for Public Safety Excellence, State Firemen's and Fire Marshals' Office, Texas Fire Marshals' Association, Texas Fire Chiefs Association, National Fire Protection Association, Texas State Association of Fire and Emergency Districts (SAFE-D), and Texas State Association of Fire Fighters.
8.	Report from Homeland Security Council Representative	Agency representative Kelly Vandygriff stated no meetings have been conducted due to COVID-19 pandemic.
9.	Request from Curtis Dunn	No action taken. Referred issue to the Curriculum and Testing Committee as well as the Fire Fighter Advisory Committee.
10.	Report from Health and Wellness Ad Hoc Committee	Commissioner Sharma, committee Chair gave a brief update on the committee meetings to date.
11.	Subjects for Future meeting agendas	Request from Danny Kitsner regarding a rule to mandate After Actions on MAYDAYs Request from Lynwood (Woody) Dunseith regarding review of Basic Fire Fighter rules regarding testing and certification requirements
12.	Future meeting dates	The commission previously set all meetings in 2021. The next commission meetings will be a workshop on July 14, 2021, followed by a commission meeting on July 15, 2021.
13.	Appointment of Ad-Hoc Committee to review 37 TAC Chapter 435 Fire Fighter Safety	Mike Jones, Chair of the committee provided the selected members names to the full commission. The members selected were Joel Baker, Robert Fite, Scott Kerwood, Jim Reidy, Brad McCutcheon, Tim Rutland, Jason Barnes, Tim Gardner
14.	Appointment of Ad-Hoc Committee to review 37 TAC, Chapter 427, Training Facility Certification	Paul Hamilton, Chair of the committee provided the selected members names to the full commission. The members selected were Brad Easley, Ricardo Cedillo Jr., James Pitts, Jacob Smith, George Malone, Stephen Malley, Mick Moffitt, Rick Wallace Commissioner Hamilton advised the commission that he still needed to fill three spots on the committee.
15.	Request from Kevin Price 37 TAC, Chapter 429, Fire Inspector and Plan Examiner	After discussion, the commission referred the issue to the Fire Fighter Advisory committee for review and recommendation.

16. Request from Kevin Price 37 TAC, Chapter 431, Fire Investigation	After discussion, the commission referred the issue to the Fire Fighter Advisory committee for review and recommendation.
17. Request from Kelly Kistner regarding Fire Marshal Certification	After discussion, the commission referred the issue to the Curriculum and Testing committee.
18. 37 TAC, Chapter 421, Standards For Certification	A motion was made by Paul Hamilton and seconded by Mike Jones to propose for publication amendments to §421.17, as discussed. The motion carried.
19. 37 TAC, Chapter 435, Fire Fighter Safety	A motion was made by Paul Hamilton and seconded by Rusty Wilson to propose for publication amendments to §435.19 with changes as discussed. The motion carried.
20. Injury Report	No action taken.
21. Review of Advisory Committees	After discussion, a motion was made by Mike Jones and seconded by Clyde Loll to table the issue until the July 15, 2021, commission meeting. The motion carried.
22. Matters from Executive Director	a. Mike Wisko, Executive Director informed the commissioners the agency had no contested cases or consent orders to report. b. Mr. Wisko provided commissioners information regarding agency division functions.
23. Executive Session	Presiding Officer, J. P. Steelman did not call for an Executive Session.
24. Public Comment	No comments.
25. Adjournment	A motion to adjourn was made by Rusty Wilson and seconded by Mike Jones . The motion carried.

J. P. Steelman, Presiding Officer

4. **The Budget and Strategic Plan subcommittee may meet on July 15, 2021, during the commission meeting and provide a report relating to any recommendations developed by the subcommittee relating to modifications to the agency operating budget and strategic plan.**

Texas Commission on Fire Protection
Fiscal Year 2021 - Operating Budget
6/1/2021

Summary

	Goals:	FY21 Budget	FY21 Expended	Balance	Remaining
	Education, Information and Assistance	112,008.00	**53,874.38**	58,133.62	
	Fire Department Standards	942,952.56	**693,386.19**	249,566.37	
	Indirect Administration	613,304.00	**441,563.83**	171,740.17	
1001 - Salaries & Wages:		**1,668,264.56**	**1,188,824.40**	**479,440.16**	**29%**
	Education, Information and Assistance	1,680.00	**9,208.09**	(7,528.09)	
	Fire Department Standards	22,932.00	**26,453.59**	(3,521.59)	
	Indirect Administration	41,960.00	**3,600.00**	38,360.00	
1002 - Other Personnel Costs		**66,572.00**	**39,261.68**	**27,310.32**	**41%**
	Education, Information and Assistance	100.00	**101.15**	(1.15)	
	Fire Department Standards	1,000.00	**895.90**	104.10	
	Indirect Administration	2,800.00	**447.95**	2,352.05	
2001 - Professional Fees and Services:		**3,900.00**	**1,445.00**	**2,455.00**	**63%**
	Education, Information and Assistance	495.00	**189.18**	305.82	
	Fire Department Standards	4,000.00	**6,325.00**	(2,325.00)	
	Indirect Administration	3,000.00	**1,075.78**	1,924.22	
2003 - Consumable Supplies:		**7,495.00**	**7,589.96**	**(94.96)**	**-1%**
	Education, Information and Assistance	10.00	**0.00**	10.00	
	Fire Department Standards	3,260.00	**4,007.94**	(747.94)	
	Indirect Administration	40.00	**0.00**	40.00	
2004 - Utilities:		**3,310.00**	**4,007.94**	**(697.94)**	**-21%**
	Education, Information and Assistance	4,425.00	**50.76**	4,374.24	
	Fire Department Standards	87,856.00	**35,816.76**	52,039.24	
	Indirect Administration	19,275.80	**7,849.74**	11,426.06	
2005 - Travel:		**111,556.80**	**43,717.26**	**67,839.54**	**61%**
	Education, Information and Assistance	10.00	**12.04**	(2.04)	
	Fire Department Standards	90.00	**106.88**	(16.88)	
	Indirect Administration	325.00	**233.41**	91.59	
2006 - Rent - Building (storage)**:**		**425.00**	**352.33**	**72.67**	**17%**
	Education, Information and Assistance	290.32	**261.31**	29.01	
	Fire Department Standards	2,903.23	**2,314.11**	589.12	
	Indirect Administration	1,306.45	**1,157.07**	149.38	
2007 - Rent - Machine and Other:		**4,500.00**	**3,732.49**	**767.51**	**17%**
	Education, Information and Assistance	5,972.09	**1,943.22**	4,028.87	
	Fire Department Standards	47,475.17	**29,546.15**	17,929.02	
	Indirect Administration	31,306.67	**36,836.71**	(5,530.04)	
2009 - Other Operating Expense:		**84,753.93**	**68,326.08**	**16,427.85**	**19%**
	Education, Information and Assistance	0.00	**0.00**	0.00	
	Fire Department Standards	16,488.7	**16,488.67**	0.00	
	Indirect Administration	0.00	**0.00**	0.00	
4000 - Grants:		**16,488.67**	**16,488.67**	**0.00**	**0%**
	TOTAL - ALL EXPENDITURES		**1,373,745.81**		
	APPROVED APPROPRIATION	**1,975,777.30**		**593,520.18**	**30%**

Texas Commission on Fire Protection
Fiscal Year 2021 - Operating Budget
6/1/2021

Summary

		01	02	03	04	05	06	07	08	09			
	Goals:	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	TOTALS	% Remaining	Budget
1001 - Salaries & Wages:	Education	$ 9,334.00	$ 9,334.00	$ 5,206.38	$ 5,000.00	$ 5,000.00	$ 5,000.00	$ 5,000.00	$ 5,000.00	$ 5,000.00	$ 53,874.38	51.90%	$ 112,008
	Standards	$ 77,042.91	$ 77,042.91	$ 77,042.91	$ 77,042.91	$ 77,042.91	$ 77,042.91	$ 77,042.91	$ 77,042.91	$ 77,042.91	$ 693,386.19	26.47%	$ 942,953
	Admin	$ 51,367.00	$ 51,367.00	$ 51,367.00	$ 48,950.84	$ 46,908.92	$ 51,908.92	$ 48,376.31	$ 45,658.92	$ 45,658.92	$ 441,563.83	28.00%	$ 613,304
											$ 1,188,824.40	**29%**	$ 1,668,265
1002 - Other Personnel Costs	Education	$ 180.00	$ 200.00	$ 200.00	$ 8,028.09	$ 120.00	$ 120.00	$ 120.00	$ 120.00	$ 120.00	$ 9,208.09	-448.10%	$ 1,680
	Standards	$ 1,556.25	$ 1,576.25	$ 1,596.25	$ 1,596.25	$ 1,636.25	$ 1,636.25	$ 1,656.25	$ 13,503.59	$ 1,696.25	$ 26,453.59	-15.36%	$ 22,932
	Admin	$ 400.00	$ 400.00	$ 400.00	$ 400.00	$ 400.00	$ 400.00	$ 420.00	$ 380.00	$ 400.00	$ 3,600.00	91.42%	$ 41,960
											$ 39,261.68	**41%**	$ 66,572
											$ -		
2001 - Professional Fees/Services:	Education	$ -	$ -	$ 101.15	$ -	$ -	$ -	$ -	$ -	$ -	$ 101.15	-1.15%	$ 100
	Standards	$ -	$ -	$ 895.90	$ -	$ -	$ -	$ -	$ -	$ -	$ 895.90	10.41%	$ 1,000
	Admin	$ -	$ -	$ 447.95	$ -	$ -	$ -	$ -	$ -	$ -	$ 447.95	84.00%	$ 2,800
											$ 1,445.00	**63%**	$ 3,900
2003 - Consumable Supplies:	Education	$ -	$ 25.10	$ 18.46	$ 23.09	$ 3.68	$ 16.03	$ 47.41	$ 2.48	$ 52.93	$ 189.18	61.78%	$ 495
	Standards	$ -	$ 541.78	$ 285.75	$ 690.61	$ 1,746.01	$ 550.99	$ 1,039.69	$ 38.68	$ 1,431.49	$ 6,325.00	-58.13%	$ 4,000
	Admin	$ -	$ 111.18	$ 81.77	$ 102.26	$ 29.22	$ 235.50	$ 270.45	$ 10.98	$ 234.42	$ 1,075.78	64.14%	$ 3,000
											$ 7,589.96	**-1%**	$ 7,495
2004 - Utilities:	Education	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	100.00%	$ 10
	Standards	$ -	$ 889.67	$ 444.88	$ -	$ 890.03	$ 445.15	$ 445.15	$ 445.33	$ 447.73	$ 4,007.94	-22.94%	$ 3,260
	Admin	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	100.00%	$ 40
											$ 4,007.94	**-21%**	$ 3,310
2005 - Travel:	Education	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 50.76	$ 50.76	98.85%	$ 4,425
	Standards	$ 774.09	$ 5,428.58	$ 2,722.17	$ 5,173.34	$ 3,676.45	$ 4,001.24	$ 3,918.60	$ 3,684.51	$ 6,437.78	$ 35,816.76	59.23%	$ 87,856
	Admin	$ -	$ 307.97	$ 115.00	$ 1,920.78	$ 266.06	$ 2,744.51	$ 1,333.66	$ -	$ 1,161.76	$ 7,849.74	59.28%	$ 19,276
											$ 43,717.26	**61%**	$ 111,557

Texas Commission on Fire Protection
Fiscal Year 2021 - Operating Budget
6/1/2021

Summary

	Goals:	01 Sept	02 Oct	03 Nov	04 Dec	05 Jan	06 Feb	07 Mar	08 Apr	09 May	TOTALS	% Remaining	Budget
2006 - Rent - Building (storage):	Education	$ -	$ -	$ 2.24	$ 1.12	$ 5.53	$ 1.05	$ 1.05	$ 1.05	$ -	$ 12.04	-20.40%	$ 10
	Standards	$ -	$ -	$ 19.88	$ 9.94	$ 49.16	$ 9.30	$ 9.30	$ 9.30	$ -	$ 106.88	-18.76%	$ 90
	Admin	$ -	$ 60.00	$ 9.92	$ 4.96	$ 84.58	$ 4.65	$ 64.65	$ 4.65	$ -	$ 233.41	28.18%	$ 325
											$ 352.33	**17%**	$ 425
2007 - Rent - Machine and Other:	Education	$ -	$ 25.11	$ 35.48	$ 32.97	$ 39.03	$ 30.27	$ 29.98	$ 32.17	$ 36.30	$ 261.31	9.99%	$ 290
	Standards	$ -	$ 222.43	$ 314.09	$ 291.93	$ 345.63	$ 268.16	$ 265.47	$ 284.82	$ 321.58	$ 2,314.11	20.29%	$ 2,903
	Admin	$ -	$ 111.22	$ 157.04	$ 145.96	$ 172.82	$ 134.09	$ 132.74	$ 142.41	$ 160.79	$ 1,157.07	11.43%	$ 1,306
											$ 3,732.49	**17%**	$ 4,500
2009 - Other Operating Expense:	Education	$ 258.10	$ 239.83	$ 202.41	$ 78.64	$ 197.64	$ 263.98	$ 161.79	$ 159.84	$ 389.42	$ 1,951.65	67.32%	$ 5,972
	Standards	$ 2,345.86	$ 3,295.19	$ 3,990.28	$ 2,307.70	$ 3,022.17	$ 3,295.17	$ 3,146.41	$ 2,763.60	$ 5,454.36	$ 29,620.74	37.61%	$ 47,475
	Admin	$ 1,265.59	$ 1,205.63	$ 1,393.26	$ 5,165.64	$ 1,218.93	$ 16,181.68	$ 7,304.19	$ 1,037.78	$ 2,101.30	$ 36,874.00	-17.78%	$ 31,307
											$ 68,446.39	**19%**	$ 84,754
4000 - Grants:	Standards	$ -	$ 2,474.94	$ -	$ 4,737.19	$ 2,454.79	$ -	$ 4,211.11	$ -	$ 2,610.64	$ 16,488.67	**0%**	$ 16,489
		$ 144,523.80	**$ 154,858.79**	**$ 147,050.17**	**$ 161,704.22**	**$ 145,309.81**	**$ 164,289.85**	**$ 154,997.12**	**$ 150,323.02**	**$ 150,809.34**	**$ 1,373,866.12**	**30%**	$ 1,967,266

Education, Information and Assistance	$ 65,648.56	**47%**	$ 124,990.41
Fire Department Standards	$ 798,927.11	**28%**	$ 1,112,468.96
Indirect Administration	$ 492,801.78	**31%**	$ 713,317.92

Fiscal Year 2021 - Operating Budget 13008
6/1/2021

Appr. 3008 PCA 4001

Goal A: Education and Assistance

		Education & Assistance	Total	% Remaining
Salaries and Wages:				
7002- Salaries		53,874.38	53,874.38	
	Budget:	**112,008.00**	**112,008.00**	
	Expended:	53,874.38	53,874.38	
1001 - Balance Salaries & Wages:		**58,133.62**	**58,133.62**	**52%**
Other Personnel Costs:				
7022- Longevity Pay		1,300.00	1,300.00	
7023- Lump Sum Termination		7,908.09	7,908.09	
	Budget:	**1,680.00**	**1,680.00**	
	Expended:	9,208.09	9,208.09	
1002 - Balance Other Personnel Costs		**(7,528.09)**	**(7,528.09)**	**-448%**
Professional Fees and Services:				
7253- Other Professional Fees (EAP)		101.15	101.15	
	Budget:	**100.00**	**100.00**	
	Expended:	101.15	101.15	
2001 - Balance Professional Fees and Services:		**(1.15)**	**(1.15)**	**-1%**
Consumables:				
7300- Consumables		189.18	189.18	
	Budget:	**495.00**	**495.00**	
	Expended:	189.18	189.18	
2003 - Balance Consumable Supplies:		**305.82**	**305.82**	**62%**
Utilities:				
	Budget:	**10.00**	**10.00**	
	Expended:	0.00	0.00	
2004 - Balance Utilities:		**10.00**	**10.00**	**100%**
Travel:				
	Budget:	**4,425.00**	**4,425.00**	
	Expended:	50.76	50.76	
2005 - Balance Travel:		**4,374.24**	**4,374.24**	**99%**
Rent:				
7470- Rent Space - storage		12.04	12.04	
	Budget:	**10.00**	**10.00**	
	Expended:	12.04	12.04	
2006 - Balance Rent - Building (storage)**:**		**(2.04)**	**(2.04)**	**-20%**
Rent - Machine and Other:				
7406- Rental - Furnishings & Equipment (copier)		261.31	261.31	
	Budget:	**290.32**	**290.32**	
	Expended:	261.31	261.31	
2007 - Balance Rent - Machine and Other:		**29.01**	**29.01**	**10%**

Fiscal Year 2021 - Operating Budget 13008
6/1/2021

Appr. 3008 PCA 4001

Goal A: Education and Assistance

		Education & Assistance	Total	% Remaining
Other Operating Expense:				
7040-	ERS-Retirement Contribution	269.37	269.37	
7042-	ERS Insurance Payment	538.74	538.74	
7219-	Fees for Receiving Electronic Payments	1.12	1.12	
7262-	Maint & Repair - Computer Software	146.87	146.87	
7291-	Postage & Postal Services	32.78	32.78	
7299-	Purchased Contracted Services	37.66	37.66	
7947-	Workers Compensation Transfer (SORM)	134.79	134.79	
7961-	STS Transfers-Telecommunications (TexAn)	341.62	341.62	
7962-	Capitol Complex (CCTS)	322.60	322.60	
	Budget:	**5,972.09**	**5,972.09**	
	Expended:	1,943.22	1,943.22	
2009 - Balance Other Operating Expense:		**4,028.87**	**4,028.87**	**67%**
	Budget:	**124,990.41**	**124,990.41**	
	Expended:	65,640.13	65,640.13	
TOTAL BALANCE - 3008		**59,350.28**	**59,350.28**	**47%**
	% Remaining	**47%**	**47%**	

Fiscal Year 2021 - Operating Budget - 13014
6/1/2021

Appr. 3014 PCA 4005 4006 4007 4008

Goal B: Fire Department Standards

	Compliance	Certification	Testing	Curriculum	Total	% Remaining
Salaries and Wages:						
7002- Salaries	269,912.25	121,511.88	265,962.06	36,000.00	693,386.19	
Budget:	**380,641.32**	**214,615.80**	**299,695.44**	**48,000.00**	**942,952.56**	
Expended:	269,912.25	121,511.88	265,962.06	36,000.00	693,386.19	
1001 - Balance Salaries & Wages:	**110,729.07**	**93,103.92**	**33,733.38**	**12,000.00**	**249,566.37**	**26%**
Other Personnel Costs:						
7022- Longevity Pay	3,420.00	3,100.00	4,700.00	180.00	11,400.00	
7023- Lump Sum Termination	0.00	11,847.34	0.00	0.00	11,847.34	
7033- Employee Retirement - Other expenses	3,206.25	0.00	0.00	0.00	3,206.25	
Budget:	**8,640.00**	**9,492.00**	**4,800.00**	**240.00**	**23,172.00**	
Expended:	6,626.25	14,947.34	4,700.00	180.00	26,453.59	
1002 - Balance Other Personnel Costs	**2,013.75**	**(5,455.34)**	**100.00**	**60.00**	**(3,281.59)**	**-14%**
Professional Fees and Services:						
7253- Other Professional Fees (EAP)	346.80	144.50	346.80	57.80	895.90	
Budget:	**388.89**	**222.22**	**333.33**	**55.56**	**1,000.00**	
Expended:	346.80	144.50	346.80	57.80	895.90	
2001 - Balance Professional Fees and Servic	**42.09**	**77.72**	**(13.47)**	**(2.24)**	**104.10**	**10%**
Consumables:						
7300- Consumables	2,286.11	371.72	3,559.06	108.11	6,325.00	
Budget:	**1,555.56**	**888.89**	**1,333.33**	**222.22**	**4,000.00**	
Expended:	2,286.11	371.72	3,559.06	108.11	6,325.00	
2003 - Balance Consumable Supplies:	**(730.55)**	**517.17**	**(2,225.73)**	**114.11**	**(2,325.00)**	**-58%**
Utilities:						
7516- Telecom-Other (reg voice/internet)	3,203.50	402.22	402.22	0.00	4,007.94	
Budget:	**2,282.00**	**489.00**	**489.00**	**0.00**	**3,260.00**	
Expended:	3,203.50	402.22	402.22	0.00	4,007.94	
2004 - Balance Utilities:	**(921.50)**	**86.78**	**86.78**	**0.00**	**(747.94)**	**-23%**
Travel:						
7101- Travel I/S - Public Transportation Fares	1,394.21	178.00	1,045.23	0.00	2,617.44	
7102- Mileage	20,188.66	0.00	65.95	0.00	20,254.61	
7105- Travel I/S - Incidental Expenses	992.85	0.00	481.20	0.00	1,474.05	
7106- Travel I/S - Meals & Lodging	10,458.87	0.00	844.65	0.00	11,303.52	
7135- Travel I/S - State Occupancy Tax	124.84	0.00	12.30	0.00	137.14	
7136- Travel I/S - State Occupancy Tax Galveston	0.00	0.00	0.00	0.00	0.00	
Budget:	**74,677.60**	**4,392.80**	**8,785.60**	**0.00**	**87,856.00**	
Expended:	33,159.43	208.00	2,449.33	0.00	35,816.76	
2005 - Balance Travel:	**41,518.17**	**4,184.80**	**6,336.27**	**0.00**	**52,039.24**	**59%**
Rent:						
7470- Rent Space - storage	41.38	17.23	41.38	6.89	106.88	
Budget:	**35.00**	**20.00**	**30.00**	**5.00**	**90.00**	
Expended:	41.38	17.23	41.38	6.89	106.88	
2006 - Balance Rent - Building :	**(6.38)**	**2.77**	**(11.38)**	**(1.89)**	**(16.88)**	**-19%**
Rent - Machine and Other:						
7406- Rental - Furnishings & Equipment (copier)	895.77	373.26	895.77	149.31	2,314.11	
Budget:	**1,129.03**	**645.16**	**967.74**	**161.29**	**2,903.23**	
Expended:	895.77	373.26	895.77	149.31	2,314.11	
2007 - Balance Rent - Machine and Other:	**233.26**	**271.90**	**71.97**	**11.98**	**589.12**	**20%**

Fiscal Year 2021 - Operating Budget - 13014
6/1/2021

Appr. 3014 PCA 4005 4006 4007 4008

Goal B: Fire Department Standards

		Compliance	Certification	Testing	Curriculum	Total	% Remaining
Other Operating Expense:							
7040-	ERS Retirement Contribution	1,349.64	607.59	1,329.84	180.00	3,467.07	
7042-	ERS Insurance Payment	2,361.60	1,215.18	2,226.53	360.00	6,163.31	
7203-	Registration Fees-Employee Training	0.00	175.00	75.00	0.00	250.00	
7219-	Fees for Receiving Electronic Payments	3.89	1.62	3.89	0.65	10.05	
7262-	Maint & Repair - Computer Equipment	503.39	209.79	503.47	83.92	1,300.57	
7273-	Reproduction & Printing	23.50	11.75	0.00	0.00	35.25	
7276-	Communication Services (T-1 Line)	2,218.44	168.10	403.44	67.24	2,857.22	
7286-	Freight & Delivery Services	0.00	0.00	6,099.64	0.00	6,099.64	
7291-	Postage & Postal Services	112.41	64.34	112.41	18.74	307.90	
7295-	Fees & Other Charges (DPS)	0.00	136.00	0.00	0.00	136.00	
7299-	Purchased Contracted Services	129.12	53.80	129.12	21.52	333.56	
7334-	Furnishings & Equipment -Expensed	742.54	0.00	365.96	0.00	1,108.50	
7380-	Computer Software - Expensed	0.00	0.00	399.00	0.00	399.00	
7806-	Interest on Delayed Payment	0.00	0.00	0.20	0.00	0.20	
7947-	Workers Compensation Transfer (SORM)	462.14	192.56	462.15	77.02	1,193.87	
7961-	STS Transfers-Telecommunications (TexAn)	1,171.26	488.03	1,171.26	195.21	3,025.76	
7962-	STS transfer to GR (CCTS)	1,106.42	461.00	1,106.42	184.41	2,858.25	
	Budget:	**18,462.57**	**10,550.04**	**15,825.06**	**2,637.51**	**47,475.17**	
	Expended:	10,184.35	3,784.76	14,388.33	1,188.71	29,546.15	
2009 - Balance Other Operating Expense:		**8,278.22**	**6,765.28**	**1,436.73**	**1,448.80**	**17,929.02**	**38%**
	Budget:	**487,811.96**	**241,315.91**	**332,259.51**	**51,321.58**	**1,112,708.96**	
	Expended:	326,655.84	141,760.91	292,744.95	37,690.82	798,852.52	
TOTAL BALANCE 3014		**161,156.12**	**99,555.00**	**39,514.56**	**13,630.76**	**313,856.44**	**28%**
	% Remaining	**33%**	**41%**	**12%**	**27%**	**28%**	

Grants:	**License Plates**	
7623-	Grant - Comm Service Program	16,488.67
	Budget:	**25,000.00**
	Excess Revenue from License Plates	0.00
	Expended:	16,488.67
4000 - Balance Grants:		**8,511.33** **34%**

YTD Current Costs for Performance Measures: Salaries, Other personnel costs, Consumables, & Travel:

	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	After FY	Total
4005 - Compliance	101,003.48	104,942.89	106,037.67	0.00		311,984.04
4006 - Certification	41,566.21	41,686.55	53,786.18	0.00		137,038.94
4007 - Testing	90,955.27	93,122.21	92,592.97	0.00		276,670.45
	233,524.96	239,751.65	252,416.82	0.00		$ 725,693.43

Fiscal Year 2021- Operating Budget - 13800
6/1/2021

Appr. 3800 PCA 4801 4802 4803

Goal C: Indirect Administration

		Exec Office	Fin Svcs	Commis	Total	% Remaining
Salaries and Wages:						
7001- Salaries & Wages - Exempt		83,743.38	0.00	0.00	83,743.38	
7002- Salaries & Wages - Non-Exempt		233,170.45	124,650.00	0.00	357,820.45	
	Budget:	**462,738.00**	**166,200.00**	**0.00**	**628,938.00**	
	Expended:	316,913.83	124,650.00	0.00	**441,563.83**	
1001 - Balance Salaries & Wages:		**145,824.17**	**41,550.00**	**0.00**	**187,374.17**	**30%**
Other Personnel Costs:						
7022- Longevity Pay		1,800.00	1,800.00	0.00	3,600.00	
	Budget:	**23,020.00**	**3,306.00**	**0.00**	**26,326.00**	
	Expended:	1,800.00	1,800.00	0.00	3,600.00	
1002 - Balance Other Personnel Costs		**21,220.00**	**1,506.00**	**0.00**	**22,726.00**	**86%**
Professional Fees and Services:						
7253- Other Professional Fees (EAP)		303.45	144.50	0.00	447.95	
	Budget:	**1,866.67**	**933.33**	**0.00**	**2,800.00**	
	Expended:	303.45	144.50	0.00	447.95	
2001 - Balance Professional Fees and Services:		**1,563.22**	**788.83**	**0.00**	**2,352.05**	**84%**
Consumables:						
7300- Consumables		628.09	447.69	0.00	1,075.78	
	Budget:	**2,000.00**	**1,000.00**	**0.00**	**3,000.00**	
	Expended:	628.09	447.69	0.00	1,075.78	
2003 - Balance Consumable Supplies:		**1,371.91**	**552.31**	**0.00**	**1,924.22**	**64%**
Utilities:						
	Budget:	**26.67**	**13.33**	**0.00**	**40.00**	
	Expended:	0.00	0.00	0.00	0.00	
2004 - Balance Utilities:		**26.67**	**13.33**	**0.00**	**40.00**	**100%**
Travel:						
7101- Travel I/S - Public Transportation Fares		443.75	0.00	1,881.16	2,324.91	
7102- Mileage		712.27	0.00	913.03	1,625.30	
7105- Travel I/S - Incidental Expenses		11.79	0.00	835.86	847.65	
7106- Travel I/S - Meals & Lodging		99.00	0.00	0.00	99.00	
7110- Travel I/S - Board Member Meals & Lodging		0.00	0.00	2,880.87	2,880.87	
7135- Travel I/S - State Occupancy Tax		0.00	0.00	72.01	72.01	
	Budget:	**1,927.58**	**0.00**	**17,348.22**	**19,275.80**	
	Expended:	1,266.81	0.00	6,582.93	7,849.74	
2005 - Balance Travel:		**660.77**	**0.00**	**10,765.29**	**11,426.06**	**59%**
Rent:						
7470- Rent Space - storage		216.18	17.23	0.00	233.41	
	Budget:	**216.67**	**108.33**	**0.00**	**325.00**	
	Expended:	216.18	17.23	0.00	233.41	
2006 - Balance Rent - Building (storage)**:**		**0.49**	**91.10**	**0.00**	**91.59**	**28%**
Rent - Machine and Other:						
7406- Rental - Furnishings & Equipment (copier)		783.81	373.26	0.00	1,157.07	
	Budget:	**870.97**	**435.48**	**0.00**	**1,306.45**	
	Expended:	783.81	373.26	0.00	1,157.07	
2007 - Balance Rent - Machine and Other:		**87.16**	**62.22**	**0.00**	**149.38**	**11%**

Fiscal Year 2021- Operating Budget - 13800
6/1/2021

Appr. 3800 PCA 4801 4802 4803

Goal C: Indirect Administration

	Exec Office	Fin Svcs	Commis	Total	% Remaining
Other Operating Expense:					
7040- ERS Retirement Contribution	1,333.61	623.25	0.00	1,956.86	
7042- ERS Insurance Payment	3,048.72	1,246.50	0.00	4,295.22	
7201- Membership Dues	0.00	126.65	0.00	126.65	
7202- registration fees - trng	0.00	0.00	0.00	0.00	
7203- Registration Fees-Employee Training	100.00	0.00	0.00	100.00	
7204- Insurance Premiums and Deductibles	0.00	0.00	0.00	0.00	
7210- Fees and Other Charges	11.00	0.00	0.00	11.00	
7211- Awards	0.00	0.00	0.00	0.00	
7216- Insurance Premiums - appvd by oag	0.00	0.00	0.00	0.00	
7219- Fees for Receiving Electronic Payments	3.40	1.62	0.00	5.02	
7262- Maint & Repair - Computer Software	440.53	209.79	0.00	650.32	
7273- Reproduction & Printing	11.75	0.00	11.75	23.50	
7276- Communication Services (T-1 Line)	4,793.01	168.10	0.00	4,961.11	
7291- Postage & Postal Services	98.36	46.84	0.00	145.20	
7295- Investigation Expenses	25.53	0.00	0.00	25.53	
7299- Purchased Contracted Services	20,771.21	53.80	0.00	20,825.01	
7334- Furnishings & Equipment -Expensed	143.58	3.79	25.00	172.37	
7947- Workers Compensation Transfer (SORM)	404.38	192.56	0.00	596.94	
7961- STS Transfers-Telecommunications (TexAn)	1,024.86	488.03	0.00	1,512.89	
7962- STS transfer to GR (CCTS)	968.09	461.00	0.00	1,429.09	
Budget:	**20,871.11**	**10,435.56**	**0.00**	**31,306.67**	
Expended:	33,178.03	3,621.93	36.75	36,836.71	
2009 - Balance Other Operating Expense:	**(12,306.92)**	**6,813.63**	**(36.75)**	**(5,530.04)**	**-18%**

Budget:	**513,537.66**	**182,432.04**	**17,348.22**	**713,317.92**	
Expended:	355,090.20	131,054.61	6,619.68	492,764.49	
TOTAL - BALANCE Remaining 3800	**158,447.46**	**51,377.43**	**10,728.54**	**220,553.43**	**31%**

Texas Commission on Fire Protection
Fiscal Year 2021 - Operating Appropriations
Tuesday, June 1, 2021

Summary		BT01	BT04	BT11	BT12	BT13	BT15	BT16	
	Appropriations	**Appr Original Budget**	**Appr Transfers In**	**Est. Coll. Revenue**	**Cash Revenue**	**Excess Collected Revenue**	**Cash Expenditures**	**Cash Reserves - Payroll**	**Appr Cash Avail.**
13008	**Fire Safety Information**	124,990.00	-	-	-	-	60,439.28	5,209.28	**$ 59,341.44**
13014	**Certify & Regulation**	1,112,469.00	-	65,000.00	89,745.00	8,595.00	720,109.99	79,843.98	**$ 337,260.03**
13800	**Indirect Admin**	713,318.00	-	-	-	-	446,085.86	46,715.92	**$ 220,516.22**
23102	Benefit Replacement	-	1,500.00	-	-	-	-	-	$ 1,500.00
90327	**State Retirement**	-	140,000.00	-	-	-	95,271.86	11,422.36	$ 33,305.78
91142	**OASI, State Match**	-	120,000.00	-	-	-	80,058.46	9,432.21	$ 30,509.33
97768	Convenience Fees	-	-	-	53,890.00	53,890.00	53,639.19	-	$ 250.81
99327	**Group Insurance**	-	235,000.00	-	-	-	152,506.19	18,954.72	$ 63,539.09
99906	Unappropriated General Rev	-	-	-	567,446.33	-	-	-	$ 567,446.33
	Totals	$ 1,950,777.00	$ 496,500.00	$ 65,000.00	$ 711,081.33	$ 62,485.00	$ 1,608,110.83	$ 171,578.47	**$ 1,313,669.03**

Revenue Comparison by Month 2020/2021

Tuesday, June 1, 2021

YTD Comparisons

	FY20 Revenue					FY21 Revenue				
	Appr 99906 - General Revenue		Appr 13014 Fund 0001- IFSAC			Appr 99906 - General Revenue		Appr 13014 Fund 0001 - IFSAC		
Sep-18	$ 312,100.00	8.2%	$ 9,360.00	12.2%	Sep-19	$ 442,435.00	10.8%	$ 11,220.00	12.5%	
Oct-18	$ 2,019,765.00	53.0%	$ 10,492.33	13.7%	Oct-19	$ 1,994,050.00	48.7%	$ 9,510.00	10.6%	
Nov-18	$ 634,767.50	16.7%	$ 9,615.00	12.6%	Nov-19	$ 610,523.62	14.9%	$ 7,950.00	8.9%	
Dec-18	$ 211,447.50	5.6%	$ 10,590.00	13.8%	Dec-19	$ 179,706.46	4.4%	$ 10,530.00	11.7%	
Jan-19	$ 198,755.00	5.2%	$ 12,450.00	16.3%	Jan-20	$ 161,562.50	3.9%	$ 9,435.00	10.5%	
Feb-19	$ 154,670.00	4.1%	$ 8,850.00	11.6%	Feb-20	$ 135,047.50	3.3%	$ 8,385.00	9.3%	
Mar-19	$ 128,964.67	3.4%	$ 8,175.00	10.7%	Mar-20	$ 191,632.50	4.7%	$ 10,290.00	11.5%	
Apr-19	$ 63,590.00	1.7%	$ 3,390.00	4.4%	Apr-20	$ 178,990.33	4.4%	$ 9,375.00	10.4%	
May-19	$ 84,430.00	2.2%	$ 3,540.00	4.6%	May-20	$ 196,823.50	4.8%	$ 13,050.00	14.5%	
Jun-19		0.0%		0.0%	Jun-20	$ -	0.0%	$ -	0.0%	
Jul-19		0.0%		0.0%	Jul-20	$ -	0.0%	$ -	0.0%	
Aug-19		0.0%		0.0%	Aug-20	$ -	0.0%	$ -	0.0%	
Totals	**$ 3,808,489.67**	100.0%	**$ 76,462.33**	100.0%		**$ 4,090,771.41**	100.0%	**$ 89,745.00**	100.0%	

FY20 Revenue Collected	**$ 3,884,952**	**107.47%**	**FY21 Revenue Collected**	**$ 4,180,516**	**115.65%**

Revenue for Biennium:	**FY20**	**FY21**
Annual GR & Appropriated Receipts	$ 1,885,777	$ 1,885,777
IFSAC Seals	$ 65,000	$ 65,000
GAA Other Direct & Indirect	$ 914,072	$ 914,072
Budget Rider	$ 750,000	$ 750,000
Subtotal	$ 3,614,849	$ 3,614,849
5% Contingency	$ 180,742	$ 180,742
Total Reqd	**$ 3,795,591**	**$ 3,795,591**
Amount Over or (Under) Required Revenue	**$ 89,361**	**$ 384,925**

	FY20	FY21	
Collected	102.35%	110.14%	Percentage of Revenue Collected
As of Date	6/1/2020	6/1/2021	

Performance Measures

Texas Commission on Fire Protection Key Performance Measures.
Verification Report as of 6/29/2021 9:34 AM for Fiscal Year 2021.
Run by Tcfp.Doc.Helpers.DocAuthorization.

Metric	Method of Calculation
* - Reported to ABEST quarterly, Q1 - Quarter 1, Q2 - Quarter 2, Q3 - Quarter 3, Q4 - Quarter 4, FY YTD - Year to date based on fiscal year	
Number of inspections of regulated entities (Cumulative): **1197** **Q1 Q2 Q3 Q4 FY YTD** Inspection 518 351 267 N/A 1136 Investigation 1 0 3 N/A 4 Training Audits 7 4 8 N/A 19 Inspection Related 23 6 9 N/A 38 *Total Inspections 549 361 287 N/A 1197	Total number of inspections of regulated entities conducted within the reporting period is obtained from the commission's data system. The total number includes biannual inspections, inspections of training programs in progress (also called audits), an inspection of an entity as part of an investigation, and meetings associated with inspections.
Number of examinations administered (Cumulative): **16767** **Q1 Q2 Q3 Q4 FY YTD** *Exams Administered 4756 4628 7383 N/A 16767	Each written examination is counted. The measure records the total number of examinations administered for fire service certification purposes. A retest, usually conducted due to failure of an initial exam, is counted as an examination as well.
Exam pass rate (Non-Cumulative): **82.31%** **Q1 Q2 Q3 Q4 FY YTD** # Examined 4756 4628 7383 1655 18422 # Passed 3965 3741 6036 1422 15164 Pass Rate 83.37% 80.83% 81.76% 85.92% 82.31%	The total number of individuals who passed their examination as reflected in the agency data management system (numerator) is divided by the total number of individuals examined (denominator) and then multiplied by 100 to achieve a percentage. Persons taking an examination multiple times are counted each time they take the exam.
Number of individuals certified (Non-cumulative): **Q1 Q2 Q3 Q4** # Individuals 0 0 0 N/A	The total number of individuals holding one or more certifications with the agency is obtained from the data system at the end of the reporting period. An individual who holds more than one certification is counted only once. The measure records the number of certified persons, regardless of whether the individuals are associated with a fire protection entity.
Number of Training Providers Certified (Non-cumulative): **Q1 Q2 Q3 Q4** # Providers 333 341 348 N/A	The total number of training providers with one or more active certifications is counted. A training provider that holds more than one certification is counted only once.
Average cost per inspection of regulated Facilities: **$199.93** **Q1 Q2 Q3 Q4 FY YTD** Cost entered $75,336.96 $79,962.66 $84,013.49 N/A $239,313.10 *Total Inspections 549 361 287 N/A 1197 *Avg cost per $137.23 $221.50 $292.73 N/A $199.93	Total cost related to inspection activities for the reporting period (numerator) is divided by the total number of inspections conducted during the same period (denominator) to determine the average cost. Costs used to perform the calculation include salaries of inspection personnel (including 25% of compliance manager's salary); travel costs directly related to inspections and inspection-related meetings with regulated entities; supplies; document review and handling; and notifications. Indirect costs are excluded.
Report was run on 6/29/2021 9:34 AM	

5. **Reports from fire service interest groups and agencies on matters relating to organizational purposes, functions, and objectives, including, but not limited to, Texas Fire Chiefs Association, the Texas State Association of Fire Fighters, the State Firemen's and Fire Marshals' Association of Texas, the Texas Fire Marshal's Association, the Texas Association of Fire Educators, the Texas A&M Forest Service, the National Fire Protection Association, Texas State Association of Fire and Emergency Districts, the Center for Public Safety Excellence, and the State Fire Marshal's Office.**

6. **Report from commission representative to the Homeland Security Council.**

7. Report from the Health and Wellness Ad Hoc committee.

8. Subjects for future commission meeting agendas.

9. Future meeting dates.

10. Matters referred from the Fire Fighter Advisory Committee (FFAC), including, but not limited to:

A. Possible final adoption of the proposed amendments as follows:

1. 37 Tex. Administrative Code, Part 13, Chapter 421, Standards For Certification.

Texas Commission on Fire Protection
Agenda Item Summary

MEETING: Commission
DATE: 07/15/21

Agenda Item #: **10 A-1**

Agenda Title: **Chapter 421, Standards For Certification**

Action to be taken: Discussion and possible final adoption

Origin of Item: ***Staff***

1. INTRODUCTION/PURPOSE

The purpose of the item is for discussion of providing an exception when special circumstances are presented for renewal of a certification that has been expired for more than one year.

2. DESCRIPTION/ JUSTIFICATION

By amending the rule, it would allow the Executive Director of the agency to determine if a special circumstance were presented in order for a certificate holder to renew a certification that had been expired for over one year without retesting for that certification.

3. BUDGET IMPACT

No budget impact is anticipated

4. TIMELINE CONSIDERATIONS

This proposal is for possible final adoption.

5. RECOMMENDATION

Propose for final adoption

6. REFERENCES

Title 37, Chapter 421, Standards For Certification

CHAPTER 421

STANDARDS FOR CERTIFICATION

§421.17. Requirement to Maintain Certification.

(a) All full-time or part-time employees of a fire department or local government assigned duties identified as fire protection personnel duties must maintain certification by the commission in the discipline(s) to which they are assigned for the duration of their assignment.

(b) In order to maintain the certification required by this section, the certificate(s) of the employees must be renewed annually by complying with §437.5 of this title (relating to Renewal Fees) and Chapter 441 of this title (relating to Continuing Education) of the commission standards manual.

(c) Except for subsection (d) of this section, **or upon determination by the Executive Director when special circumstances are presented,** an individual whose certificate has been expired for one year or longer may not renew the certificate previously held. To obtain a new certification, an individual must meet the requirements in Chapter 439 of this title (relating to Examinations for Certification).

(d) A military service member whose certificate has been expired for three years or longer may not renew the certificate previously held. To obtain a new certification, the person must meet the requirements in Chapter 439 of this title[~~(relating to Examinations for Certification)~~]. In order to qualify for this provision, the individual must have been a military service member at the time the certificate expired and continued in that status for the duration of the three-year period.

(e) The commission will provide proof of current certification to individuals whose certification has been renewed.

10. Matters referred from the Fire Fighter Advisory Committee (FFAC), including, but not limited to:

A. Possible final adoption of the proposed amendments as follows:

2. 37 Tex. Administrative Code, Part 13, Chapter 435, Fire Fighter Safety.

Texas Commission on Fire Protection
Agenda Item Summary

MEETING: Commission
DATE: 07/15/21

Agenda Item #: **10 A-2**

Agenda Title: **Chapter 435, Fire Fighter Safety**

Action to be taken: Discussion and possible final adoption

Origin of Item: ***Staff***

1. INTRODUCTION/PURPOSE

The purpose of the item is for discussion to amend the rule regarding prior notification of a commission compliance inspection of a regulated entity.

2. DESCRIPTION/ JUSTIFICATION

By amending the rule language, it will streamline the process for agency compliance officers and shorten the amount of time necessary to complete the biennial inspection of the regulated entity.

3. BUDGET IMPACT

No budget impact is anticipated

4. TIMELINE CONSIDERATIONS

This proposal is for possible final adoption.

5. RECOMMENDATION

Propose for final adoption

6. REFERENCES

Title 37, Chapter 435, Fire Fighter Safety

CHAPTER 435

FIRE FIGHTER SAFETY

§435.19. Enforcement of Commission Rules.

(a) The commission shall enforce all commission rules at any time, including, but not limited to, commission investigations, fire department inspections, or upon receiving a written complaint from an identified person or entity of an alleged infraction of a commission rule.

(b) The commission shall **initiate a biennial inspection with an email notifying the fire department and requesting electronic copies of the Standard Operating Procedures (SOPs), training records, and/or other documentation needed for review, be submitted within 48 business hours of notification. The e-mail will also indicate the date range for an on-site inspection within the upcoming two-week period. Compliance officers may work with the Head of Department to ensure all necessary department representatives will be present at the time of the on-site inspection. Compliance Officers may postpone an inspection for extenuating circumstances with the approval of the Compliance Manager.**[~~not provide prior notification of an inspection to a fire department.~~]

(c) Upon receipt of a signed complaint alleging a violation of a commission rule, the commission shall have 30 days to initiate an investigation and report back to the complainant its progress.

(d) Upon substantiating the validity of a written complaint, the commission shall follow the procedures outlined in Texas Government Code, Chapter 419, §419.011(b) and (c).

10. Matters referred from the Fire Fighter Advisory Committee (FFAC), including, but not limited to:

B. Report from the Curriculum and Testing Committee regarding possible changes to the Certification Curriculum Manual as follows:

a. Basic Aircraft Rescue Fire Suppression Curriculum

SECTION 200

BASIC AIRCRAFT RESCUE FIRE SUPPRESSION

Basic Aircraft Rescue Fire Fighting Personnel

The Fire Fighter II who has demonstrated the skills and knowledge necessary to function as an integral member of an aircraft rescue and fire fighting (ARFF) team.

200-4.1 General

200-4.1.1 Qualifications

To be qualified as an **A**irport **F**ire **F**ighter, the candidate shall meet the requirements for Texas Commission on Fire Protection (TCFP) certification as Fire Fighter II, as defined in NFPA 1001 **and the requirements for Airport Fire Fighter defined in this standard.**

200-4.1.1.1 Duties

These requirements shall be divided into three major duties: response, fire suppression and rescue.

200-4.1.1.2 Function

The primary function of the **A**irport **F**ire **F**ighter shall be to execute fire suppression and rescue activities.

200-4.1.1.3 General Knowledge Requirements

Fundamental aircraft fire-fighting techniques, including the approach, positioning, initial attack, and selection, application, and management of the extinguishing agents; limitations of various sized hand lines; use of personal protective equipment (PPE); fire behavior; fire-fighting techniques in oxygen-enriched atmospheres; reaction of aircraft materials to heat and flame; critical components and hazards of civil aircraft construction and systems related to ARFF operations; special hazards associated with military aircraft systems; a national defense area and limitations within that area; characteristics of different aircraft fuels; hazardous areas in and around aircraft; aircraft fueling systems (hydrant/vehicle); aircraft egress/ingress (hatches, doors, and evacuation chutes); hazards associated with aircraft cargo, including dangerous goods; hazardous areas, including entry control points, crash scene perimeters, and requirements for operations within the hot, warm, and cold zones; and critical stress management policies and procedures.

1) Fundamental aircraft fire-fighting techniques of approach
    a. Size up
        i. Weather
        ii. Terrain
        iii. Debris trail
        iv. Exposures
        v. Aircraft
            1. Size/type
            2. Fire
                a) Absence
                b) Presence
            3. Souls on Board (SOB)
            4. Fuel on board

2) Fundamental aircraft fire-fighting techniques of positioning
    a. Weather
    b. Terrain
    c. Exposures
    d. Aircraft
        i. Size/Type
        ii. Fire
            1. Absence
            2. Presence
    e. Impact
        i. High
        ii. Low
    f. Non-impact
        i.Fire
            1. Interior
            2. Exterior
        ii.No fire
    g. Egress routes
    h. Wreckage
        i. Intact
        ii. Fragmented
        iii. Debris trail
        iv. Upside down
    i. Scene preservation
    j. Hazardous areas
        i. Fuel
            1. Jet fuels

2. AVGAS
3. Other fuels

ii. Engines
1. Jet turbine
2. Propellers
3. Rotors

iii. Military ordnance/armament
iv. Collapse zones
v. Dangerous goods

3) Fundamental aircraft fire-fighting techniques of initial attack
   a. Rescue of occupants
      i. Isolation
      ii. Insulation
   b. Fire control
      i. Interior
      ii. Exterior
   c. Loss control

4) Fundamental aircraft fire-fighting techniques of fire extinguishing agents
   a. Selection
      i. Water
      ii. Foaming agents
      iii. Dry chemicals
      iv. Halogenated agents and halon replacements
      v. Dry powders
   b. Application
      i. Turret
      ii. Hand line
      iii. Hand held extinguishers
      iv. Special appliance(s)
   c. Management
      i. Conservation of agent
      ii. Replenishment

5) Limitations of various sized hand lines
   a. Diameter
   b. Discharge
   c. Length of hand line
   d. Reach of agent application

6) Use of personal protective equipment (PPE)
    a. Personal Protective Clothing
        i. Station/work uniform
        ii. Structural fire-fighting protective clothing
        iii. Proximity fire-fighting protective clothing
        iv. Chemical protective clothing
    b. Respiratory protection (SCBA)
        i. Conditions that require respiratory protection
            1. Oxygen deficiency
            2. Elevated temperatures
            3. Toxic environments
            4. Smoke (by-products of combustion)
    c. Donning of PPE
    d. Doffing of PPE
    e. Care of PPE
    f. Cleaning of PPE
    g. Inspections of PPE
    h. Limitations of PPE
    i. Maintenance of PPE
        i. Replacement
        ii. Storage

7) Conditions that require respiratory protection
    a. Oxygen deficiency
    b. Elevated temperatures
    c. Toxic environments
    d. Smoke (by-products of combustion)

8) Fire behavior
    a. Class A fires
        i. Aircraft interior
        ii. Aircraft cargo
        iii. Airport structures
    b. Class B fires
        i. Pooled fuel
        ii. Three-dimensional
    c. Class C fires
        i. Avionics
        ii. Wiring
    d. Class D fires
        i. Landing gear

ii. Engine components

9) Fire-fighting techniques in oxygen-enriched atmospheres
    a. Recognizing an oxygen enriched atmosphere
    b. Defensive tactics to reduce oxygen concentration

10) Reaction of aircraft materials to heat and flame
    a. Aluminum and aluminum alloy
    b. Steel
    c. Magnesium and magnesium alloy
    d. Titanium
    e. Advance aerospace (composite) materials
    f. Wood

11) Critical components and hazards of civil aircraft construction and systems related to ARFF operations
    a. Pinching and limb severing hazards
    b. Propeller dangers
    c. Helicopter hazards
    d. Jet-Engine hazards
    e. Evacuation hazards
    f. Ballistic recovery systems
    g. Landing gear
    h. Wheel assemblies
    i. Electrical systems
    j. Hydraulic systems
    k. Advanced aircraft composite materials
    l. Fuel systems
    m. Radar systems
    n. Pressurized cylinders
    o. Oxygen supply systems
    p. Protruding devices
    q. Ram Air Turbine (RAT)

12) Special hazards associated with military aircraft systems
    a. Pinching and limb severing hazards
    b. Propeller dangers
    c. Helicopter hazards
    d. Jet-engine hazards
    e. Evacuation hazards
    f. Ejection seats

g. Landing gear
h. Wheel assemblies
i. Electrical systems
j. Hydraulic systems
k. Advanced aircraft composite materials
l. Fuel systems
m. Special or exotic fuels
n. Radar systems
o. Pressurized cylinders
p. Oxygen supply systems
q. Protruding devices
r. RAT (Ram Air Turbine)
s. Weapons and weapon systems
t. Aircraft emergency systems

13) A national defense area and limitations within that area
    a. Department of Defense (DOD) designation
    b. Exclusion area for ARFF

14) Characteristics of different aircraft fuels
    a. Civilian
    b. Military

15) Hazardous areas in and around aircraft
    a. Hazard areas in the aircraft
        i. Cockpit/flight deck
        ii. Cargo area
        iii. Galley
        iv. Avionics area
        v. Energized electrical area
    b. Hazardous areas around the aircraft
        i. Propellers
        ii. Engines
        iii. Military armament
        iv. Collapse zones
        v. Wheel assembly
        vi. Aircraft radar
        vii. RAT (Ram Air Turbine)
        viii. Ballistic Recovery System

16) Aircraft egress/ingress (hatches, doors, and evacuation chutes)

a. Aircraft egress
    i. Doors
    ii. Hatches
    iii. Slides
    iv. Door height
    v. Stairs
    vi. Emergency exits
    vii. Emergency rafts
    viii. Flight deck windows
b. Aircraft ingress
    i. Doors
    ii. Hatches
    iii. Door height
    iv. Stairs
    v. Ladders
    vi. Emergency exits
    vii. Air stairs

17) Hazards associated with aircraft cargo, including dangerous goods
    a. Laws and regulations
        i. Classifications of dangerous goods
        ii. Shipment of dangerous goods
    b. Product identification
        i. Identification
        ii. Verification
        iii. Information gathering
    c. Personal Protective Equipment (PPE)
        i. NFPA levels of protection
            1. Structural gear
            2. Proximity gear (PrPPE)
            3. Chemical protective clothing
                a) Vapor protective
                b) Liquid splash protective
        ii. Environmental Protection Agency (EPA) levels of protection
            1. Level A
            2. Level B
            3. Level C
            4. Level D
    d. Dangerous goods operations
    e. Agricultural applications

18) Hazardous areas, including entry control points, crash scene perimeters, and requirements for operations within the hot, warm, and cold zones
    a. Hazardous areas
    b. Entry control points
    c. Crash scene perimeters
    d. Operational Zones
        i. Hot Zone (Restricted Zone)
        ii. Warm Zone (Limited Access Zone)
        iii. Cold Zone (Support Zone)

19) Critical stress management policies and procedures
    a. Policies
        i. Authority Having Jurisdiction (AHJ)
    b. Procedures
        i. Coping with stress
        ii. Critical Incident Stress Debriefing (CISD)

Instructor Note

200-A.4.1.1.3 **Airport Fire Fighters should possess knowledge of military aircraft at those airports that accept military aircraft or at those airports that are co-located with a military installation with either separate or shared runways. This knowledge should include the following:**

(1) Military cargo/passenger aircraft
(2) Military tanker aircraft
(3) Military fighter/attack aircraft
(4) Military helicopter aircraft

Instructor Note (Cont. 200-A.4.1.1.3)

USAF Technical Order 00-105E-9 *Aerospace Emergency Rescue and Mishap Response Information* (*Emergency Services*), contains specific information concerning aircraft rescue and firefighting procedures and should be consulted prior to any attempts to perform rescue operations if trained military specialists are not available for immediate assistance. USN/USMC aircraft information is located in NAVAIR 00-80R-14 and 00-80R-14-1. These documents contain specific information concerning fire-fighting and rescue operations for aircraft in the military inventory. They specifically address the following:

(1) Entry. If emergency controls are activated, an explosive charge will explosively separate the canopy from the aircraft.

(2) Ejection systems. All fighter, bomber, and attack aircraft are equipped with ejection seats. Once access has been gained to the cockpit, caution is extremely important, because these ejection seats, when activated, are propelled out of the aircraft by an explosive charge. Airport Fire Fighters should not touch or activate any controls. Note that if a canopy or hatch has been separated from an aircraft, the ejection seat is automatically armed. Extreme caution must be exercised in crew removal.

(3) Extrication. The aircrew member is secured to the seat by a series of straps, harnesses, and restraint belts. These restraints can be released by cutting if the release procedure is unknown.

(4) Ordnance. Fighter and attack aircraft will have forward firing ordnance located in the forward part of the fuselage and wings.

Instructor Note (Cont. 200-A.4.1.1.3)

(5) Engine shutdown. Engine shutdown usually can be accomplished by pulling T-handles, as on a commercial jet.

200-4.1.1.4 General Skills Requirements

Don PPE; operate hatches, doors, and evacuation chutes; approach, position, and initially attack an aircraft fire; select, apply, and manage extinguishing agents; shut down aircraft systems, including engine, electrical, hydraulic, and fuel systems; operate aircraft extinguishing systems, including cargo area extinguishing systems.

200-4.1.2 Occupational Safety and Health

The job performance requirements of this chapter shall be accomplished in accordance with the requirements of the authority having jurisdiction and NFPA 1500, *Standard on Fire Department Occupational Safety and Health Program*.

200-4.2 Response

This duty involves the timely arrival at an incident or accident and the capability to perform emergency functions. The duty also includes responding to hazardous conditions and performing standby operations.

200-4.2.1 Respond to day and night incidents or accidents on and adjacent to the airport, given an assignment, operating conditions, a location, a grid map, a vehicle, and a prescribed response time, so that the route selected and taken provides access to the site within the allotted time.

Requisite Knowledge: Airport familiarization, including runway and taxiway designations, frangible gate locations, airport markings, lights, **i**nstrument **l**anding **s**ystem (ILS) critical areas, and critical rescue and fire-fighting access areas, recognize the impact of low-visibility conditions on movement areas and areas of response in and close to the airport; designated isolation areas; vehicular traffic controls on airfield; bridge load limits; controlled access points; aircraft traffic patterns and taxi routes; fuel storage and distribution locations; airport and immediate local area topographic layout, drainage systems, water supplies, airport facilities and security.

Airport familiarization, including:

1) Runway and taxiway designations
    a. Runway identification
        i. Designation
            1. Compass heading
            2. Numbers and letters
        ii. Markings
            1. White
            2. Yellow
        iii. Signage
        iv. Lighting
            1. White
            2. Amber
            3. Red
            4. Green
    b. Taxiway identification
        i. Designation
            1. Phonetic alphabet
            2. Name
        ii. Markings
        iii. Signage
        iv. Lighting
            1. Blue
            2. Green

2) Frangible gate locations
    a. AHJ
    b. Gate controlled access
    c. Alternate response route
        i. Weather
        ii. Location
        iii. Terrain
        iv. Topography

3) Airport markings
    a. Aircraft operations area (AOA)
        i. Pavement markings
            1. White
            2. Red
            3. Yellow
        ii. Signs

1. Mandatory instruction
2. Runway hold position
3. Location signs
4. Direction signs
5. Destination signs
6. Information signs
7. Runway distance remaining signs

b. Non aircraft operations area
   i. AHJ
   ii. Department of Transportation (DOT)
   iii. Designated diesel vehicle regeneration area

4) Lights
   a. Surface lighting
      i. Blue lights
      ii. White lights
      iii. Green lights
      iv. Red lights
      v. Amber or yellow lights

5) Instrument landing system (ILS) critical areas
   a. Locations per AHJ
   b. Identification
   c. Interference
   d. Alternate response routes
   e. Hazards

6) Critical rescue and fire-fighting access areas (CRFFAA)
   a. Location in relation to grid map (AHJ)
   b. Size
      i. Departure and approach area
      ii. Distance from runway centerline

7) Recognize the impact of low-visibility conditions on movement areas and areas of response in and close to the airport
   a. Driver's Enhanced Vision systems (DEVs)
      i. Night vision
      ii. Navigation
      iii. Tracking

8) Designated isolation areas (AHJ)

a. Predetermined area designed for temporary parking for aircraft experiencing hazardous cargo problems
b. Know isolation location for your airport (AHJ)
    i. Hijacking
    ii. Bomb threat
    iii. Terrorist attack
    iv. Weapons of Mass Destruction (WMD)
    v. Bio-Hazards
        1. Cargo
        2. Passengers
c. Military

9) Vehicular traffic controls on airfield
    a. Navigational Aids (NAVAIDS)
    b. Construction
    c. Airport markings
        i. Hold bars
        ii. Safety zones
    d. Airport ramps
    e. Fences and gates
    f. All weather roads

10) Bridge load limit/overpass clearance (AHJ)
    a. Road weight limits
    b. ARFF apparatus weight and height
    c. Local area bridges in the response area covered by AHJ
    d. Alternate routes

11) Controlled access points
    a. Solid red marking
    b. Fences and gates
    c. Mandatory signs

12) Aircraft traffic patterns and taxi routes (AHJ)
    a. Patterns used by aircraft in the vicinity of the airport
    b. Emergency declarations for aircraft
    c. Components of the pattern
        i. Crosswind leg
        ii. Downwind leg
        iii. Base leg
        iv. Final approach

d. Designated routes for aircraft to final destinations

13) Fuel storage and distribution locations (AHJ)
    a. Airport fuel operations
        i. Fuel storage
        ii. Supply methods
        iii. Fuel distribution systems
        iv. Aircraft fueling methods
    b. Airport fuel operation locations
    c. Emergency fuel operation shut-down
    d. Preplanning for emergencies
    e. Fire protection ~~fighting~~ systems

14) Airport and immediate local area topographic layout
    a. Airport layout
    b. Airport markings
    c. Length and width of runways
    d. Taxiway identification
    e. Streets and highway within the emergency response area on airport, and off airport
    f. Grid map
    g. Local terrain features
    h. Response area off airport property
    i. Bodies of water
    j. Airport structures

15) Drainage systems (AHJ)
    a. Drainage system dynamics
    b. Drainage system openings
    c. Fuel/water separator
    d. Containment for drainage
    e. Run off locations
    f. Airport without drainage system
        i. Pre-planning for the event
        ii. Confinement
        iii. Containment
        iv. Clean up and recovery efforts

16) Water supplies (AHJ)
    a. Sources
        i. Wells

ii. Tanks
iii. Domestic supply

b. Hydrant locations
c. Mobile supply types
i. Fire apparatus
ii. Tankers/tenders
d. Mutual aid response for water supply
e. Pre-planning for water supply strategies

17) Airport facilities
a. Terminals
i. Life safety concerns
ii. Jetways
iii. Baggage handling areas
iv. Mass transportation equipment
v. Hotels
vi. Parking garages
vii. Controlled access
b. Aircraft Maintenance Facilities
i. Fuel system repair
ii. Painting facilities
iii. Hazardous materials storage
iv. Aircraft electrical, avionics and radar systems repair locations
v. Welding and cutting locations
vi. Office locations and high occupancy areas
vii. Fire prevention

18) Airport Security and Controlled Access Points
a. Airfield perimeter fencing/protection
b. Controlled access points (already stated)
i. Manned access points
ii. Unmanned access points - Radio Frequency Identification (RFID) or remote control
iii. Manually operated gates
iv. Frangible gates
c. Vehicle incursion prevention systems
i. Tiger teeth (tire damaging systems)
ii. Barriers
d. Airfield vehicle eligibility markings
i. Decals

ii. Lighting

e. Airfield personnel eligibility identification
   i. SIDA (Security Identification Display Area)

Requisite Skills: Read, interpret, and take correct action related to grid maps, water distribution maps, airport markings, and lights.

200-4.2.2 Communicate critical incident information regarding an incident on or adjacent to an airport, given an assignment involving an incident and an incident management system (IMS) protocol, so that the information provided is accurate for the incident commander.

Requisite Knowledge: Incident management system (IMS) protocol, the airport emergency plan, airport and aircraft familiarization, communications equipment and procedures, and incident communications procedures.

1) Incident management system (IMS) protocol
   a. IMS and the functional responsibilities (AHJ)
   b. Strategic goals
   c. Tactical objectives
   d. IMS Organizational Chart (AHJ)
   e. Chain of command (AHJ)

2) The airport emergency plan (AHJ)
   a. Mutual aid resources
   b. Fire rescue resources
   c. Emergency medical resources
   d. Law enforcement resources
   e. Other airport personnel
   f. Critical stress management
   g. Mitigation

3) Airport familiarization (AHJ)
   a. Airport traffic flow systems
      i. Aircraft
      ii. Vehicular
   b. Location of incident
      i. Runways
      ii. Taxiways
      iii. Grid map
   c. Access control points

d. Approach safety areas
e. Departure safety areas
f. National Defense Area limitations

4) Aircraft familiarization
    a. Aircraft types
        i. Commercial
        ii. General aviation
        iii. Military aircraft
        iv. Unmanned aircraft vehicle (UAV)/Unmanned aircraft systems (UAS)
    b. Aircraft systems
    c. Hazards of aircraft
    d. Aircraft fuels
    e. Aircraft evacuation

5) Communications equipment and procedures
    a. Airport communication systems
    b. Communication protocols
        i. Radio communications
            1. International Civil Aviation Organization (ICAO)
            2. ICAO phonetic alphabet
        ii. Computers
            1. Mobile Data Terminals (MDT)
            2. Mobile Computer Terminals (MCT)
            3. Global Positioning Systems (GPS)
        iii. Air Traffic Control Tower (ATCT) Light-gun signals and their meanings
            1. Steady green
            2. Steady red
            3. Flashing red
            4. Flashing white
            5. Alternating red/green
        iv. Aircraft Hand signals
            1. Recommend evacuation
            2. Recommend stop
            3. Emergency contained
        v. Other fire-fighting audible/visible signals
            1. Back out or retreat
            2. Apparatus is running out of agent
            3. Open or close hand line

4. Change hand line nozzle/stream pattern
5. Advance with hand line
6. Back out with hand line

6) Incident communications procedures
   a. Emergency response notification methods (AHJ)
      i. Categories of emergency alerts (FAA – Federal Aviation Administration)
   b. Pilot/ARFF (Discrete Emergency Frequency - DEF)
   c. Agency operations frequencies
   d. Mutual aid frequencies

Requisite Skills: Operate communications systems, communicate an accurate situation report, implement incident management system (IMS) protocol and airport emergency plan, and recognize aircraft types.

200-4.2.3 Communicate with applicable air traffic control facilities, given a response destination on or adjacent to an airport and radio equipment, so that all required clearances are obtained.

Requisite Knowledge: Airfield familiarization, airport operational procedures, avoiding runway/aircraft movement area incursion, communications equipment and frequencies, tower light signals, aviation **terminology**, and phonetic alphabet.

1) Airfield familiarization

2) Airport operational procedures

3) Avoiding runway/aircraft movement area incursion

4) Communications equipment and frequencies
   a. ATCT (Air Traffic Control Tower)
      i. Ground control
      ii. Local control or tower frequencies
      iii. Discrete Emergency Frequency (DEF) (AHJ)
   b. Aviation radio
      i. Procedures
      ii. Terminology
   c. Fire frequency radio (AHJ)

5) ATCT light-gun signals

a. Used in the event of communication failure with ATCT
b. Colors
    i. Steady green
    ii. Steady red light
    iii. Flashing red light
    iv. Flashing white light
    v. Alternating red and green light

6) Aviation ~~phraseology~~ terminology

7) Phonetic alphabet

Requisite Skills: Operate communications equipment and use aviation **terminology** and phonetic alphabet.

200-4.2.4 Perform an airport operation, given an assignment, a hazardous condition, and the airport policies and procedures, so that unsafe conditions are detected and reduced in accordance with the airport policies and procedures.

Requisite knowledge: Airport and aircraft policies and procedures for hazardous conditions.

1) Airport policies and procedures for hazardous conditions
    a. Airport Certification Manual (ACM)
    b. Airport Emergency Plan (AEP)
    c. Notification of the hazardous condition
        i. Accident
        ii. Incident
        iii. Emergency
    d. Response
    e. Initiation of IMS
    f. ARFF safety
    g. Airport structure emergencies
        i. Terminals
        ii. Hangars
    h. Fuel storage and distribution
    i. Fuel spills
    j. Aircraft fueling operations
    k. Aircraft maintenance areas
        i. Welding
        ii. Painting
    l. Airport Environment
        i. Construction

ii. Traffic
iii. Drainage
iv. Airport Topography
v. Review wildlife management plan

m. Designated isolation areas
i. Bomb threats
ii. Terrorists
iii. Hazardous materials
iv. Hijacking
v. Weapons of Mass Destruction (WMD)
vi. Bio-Hazards
vii. Hot brakes
viii. Weapons malfunction

2) Aircraft policies and procedures for hazardous conditions
a. Airport emergency plan (AHJ)
b. Standardized response
c. Coordination with flight crew
d. Aircraft familiarization
e. Aircraft emergencies
i. Ground emergencies
ii. In-flight emergencies

Requisite Skills: Recognize hazardous conditions and initiate corrective action.

Instructor Note

200-A.4.2.4 Hazardous conditions include foreign object debris (FOD), special fuels, fueling operations (grounding and bonding), welding operations, hazardous materials operations, corrosion control, fuel-cell maintenance, and military operations.

200-4.3 Fire Suppression

This duty involves the attack, control, and extinguishment of fires involving aircraft, aircraft cargo, airport facilities, and other equipment related to airport operations and property conservation. The primary purpose of this duty is to protect lives and property.

200-4.3.1 Extinguish an aircraft fuel spill fire, given approved PPE, an assignment, agent application procedures, a fire-fighting vehicle hand line flowing a minimum of 95 gpm (359 L/min) of approved foam extinguishing agent,

and a fire sized to the flow rate used, so that the agent is applied using the prescribed techniques and the fire is extinguished as required by the AHJ.

Requisite Knowledge: The fire behavior of aircraft fuels in pools, physical properties and characteristics of aircraft fuel, and agent application rates and densities.

1) Fire behavior of aircraft fuels in pools
    a. Flame spread
    b. Flashback (re-ignition)
    c. Vapors
    d. Flammability

2) Physical properties of aircraft fuels
    a. Aviation gasoline (AVGAS)
        i. Weight
        ii. Specific gravity
        iii. Vapor density
    b. Jet-A (grade of kerosene)
        i. Weight
        ii. Specific gravity
        iii. Vapor density
    c. Other fuels
        i. Bio-fuel
        ii. Blended
        iii. Military grade
        iv. Alternative fuels

3) Characteristics of aircraft fuels
    a. Flashpoint
    b. Auto ignition temperature
    c. Explosive limits
        i. Upper
        ii. Lower
    d. Flame spread
    e. Vapor pressure

4) Agent application rates and densities
    a. Agent application - minimum 95 gpm @ at nozzle pressure specified by manufacturer

b. Agent application and proportioning (in accordance with manufacturer's specifications) approved foam extinguishing agent and a fire sized to the flow rate used

Requisite Skills: Operate fire streams and apply agent.

Instructor Note

200-A.4.3.1 The use of pressurized flammable gas or flammable liquid is acceptable for this simulation Depending on the square footage of the local training simulators and the flow rate of the assigned application device, the specified time of extinguishment might need to be modified. When using simulators with lower square footage or different flow rates of agent application, the specified time of extinguishment will need to be proportional.

For example, a hand line flowing 95 gpm (359 L/min) would be required to extinguish a fire of 750 ft² in 90 seconds. The formula is 95 gpm/0.13 = 730 fire square footage for 750 ft ² (69.7 m²) fire with a flow rate at 359L/min (95 gpm).

200-4.3.2 Extinguish an aircraft fuel spill fire, given an assignment, approved PPE, an ARFF vehicle turret flowing the approved minimum required flow, a fire sized to the approved flow rate used, and the procedures for agent application, so that the agent is applied according to procedures and the fire is extinguished as required by the AHJ.

Requisite Knowledge: Operation of ARFF vehicle agent delivery systems, the fire behavior of aircraft fuels in pools, physical properties and characteristics of aircraft fuel, the procedures for agent application, and agent application rates and densities.

1) Operation of ARFF vehicle agent delivery systems
   a. As per manufacturer operating procedures
   b. Per AHJ

2) Fire behavior of aircraft fuels in pools

a. Flame Spread
b. Flashback (re-ignition)
c. Vapors
d. Flammability

3) Physical properties of aircraft fuels
    a. Aviation gasoline (AVGAS)
        i. Weight
        ii. Specific gravity
        iii. Vapor density
    b. Jet-A (grade of kerosene)
        i. Weight
        ii. Specific gravity
        iii. Vapor density
    c. Other fuels
        i. Bio-fuels
        ii. Blended
        iii. Military grade
        iv. Alternative fuels

4) Characteristics of aircraft fuels
    a. Flashpoint
    b. Auto ignition temperature
    c. Explosive limits
        i. Upper
        ii. Lower
    d. Flame spread
    e. Vapor pressure

5) Agent application rates and densities
    a. Agent application rate - minimum 250 gpm @ at nozzle pressure specified by manufacturer
    b. Agent application and proportioning (in accordance with manufacturer's specifications) approved foam extinguishing agent and a fire sized to the flow rate used

Requisite Skills: Apply fire-fighting agents and streams using ARFF vehicle turrets.

Instructor Note

200-A.4.3.2 See A.4.3.1. For example, a candidate using a turret flowing 250 gpm (946 L/min) is required to extinguish a fire of 2067 ft² (192 m²) fire with a flow rate at 250 gpm (946 L/min).

200-4.3.3 Extinguish a three-dimensional aircraft fuel fire as a member of a team, given a team, approved PPE, an assignment, fire-fighting vehicle hand line(s) using primary and secondary agents, and agent application procedures, so that a dual-agent attack is used, the agent is applied according to procedures, the fire is extinguished, and the fuel source is secured.

Requisite Knowledge: The fire behavior of aircraft fuels in solid, pressurized, and atomized states; physical properties and characteristics of aircraft fuel; advantages and limitations of agents; agent application rates and densities, agent application procedures; and methods of controlling fuel sources.

1) Fire behavior of aircraft fuels in solid, pressurized, and atomized states
    a. Explosive atmosphere
    b. Higher proliferation of vapors

2) Physical properties of aircraft fuels
    a. Aviation gasoline (AVGAS)
        i. Weight
        ii. Specific gravity
        iii. Vapor density
    b. Jet fuel
        i. Weight
        ii. Specific gravity
        iii. Vapor density
    c. Other fuels
        i. Bio-Fuels
        ii. Blended
        iii. Military grade
        iv. Alternative fuels

3) Characteristics of aircraft fuels
    a. Flashpoint
    b. Auto ignition temperature
    c. Explosive limits
        i. Upper
        ii. Lower
    d. Flame spread
    e. Vapor pressure

4) Advantages of agents

5) Limitations of agents

6) Agent application rates and densities
    a. Agent application rate
        i. Minimum 95 gpm @ at nozzle pressure specified by manufacturer
        ii. Minimum 5 lbs/second dry chemical
    b. Agent application densities
        i. Agent application and proportioning (in accordance with manufacturer's specifications) approved foam extinguishing agent and a fire sized to the flow rate used
        ii. Amount of dry chemical proportionate to hazard

7) Agent application procedures
    a. Rapid knock down
    b. Vapor suppression

8) Methods of controlling fuel sources
    a. Shut off source
    b. Control ignition source
    c. Suppress vapors
    d. Prevent run-off

Requisite Skills: Operate fire streams and apply agents; and secure fuel sources.

Instructor Note

200-A.4.3.3 Three-dimensional or running fuel fires involve a fuel leak from an elevated or pressurized source. The fuel burns as it falls through the air, and, once on the ground, the burning fuel can pool or run across the ground surface. These fuel fires are extremely difficult to extinguish. They must be recognized and action must be taken to extinguish them early in the incident or accident for successful fire-fighting operations. Typically, these fires cannot be extinguished by smothering agents such as AFFF, because those agents cannot seal the surface and exclude oxygen. Such fires are more successfully extinguished by shutting off the fuel flow or by using agents, such as dry chemicals, that interfere with the chemical chain reaction.

200-4.3.4 Attack a fire on the interior of an aircraft while operating as a member of a team, given a team, approved PPE, an assignment, a fire-fighting vehicle hand line, an extinguishing agent, and a ladder or other means of accessing the aircraft, so that team integrity is maintained, the attack line is deployed for advancement, ladders or other means are used, access is gained into the fire area, effective agent application practices are used, the fire is approached, attack techniques facilitate suppression given the level of the fire, hidden fires are located and controlled, hazards are avoided or managed, and the fire is brought under control.

Requisite Knowledge: Techniques for accessing the aircraft interior according to the aircraft type, methods for advancing hand lines from an fire-fighting vehicle, precautions to be followed when advancing hose lines to a fire, observable results that a fire stream has been applied, dangerous structural conditions created by fire, principles of exposure protection, potential long-term consequences of exposure to products of combustion, physical states of matter in which fuels are found, common types of accidents or injuries and their causes, the role of the backup team in fire attack situations, attack and control techniques, and techniques for exposing hidden fires.

1) Techniques for accessing the aircraft interior according to aircraft type
    a. Assessing the exterior prior to entry
        i. Blistering or peeling of paint
        ii. Visible signs of heavy interior fire

iii. Exterior is very hot to the touch
iv. Engine fires
v. Wheel assembly fires
vi. HVAC system fires

b. Access points
i. Doors
1. Cabin
2. Cargo
ii. Emergency exits
iii. Rear stairs
iv. Hatches
v. Windows
vi. Fuselage breach

c. Access equipment
i. Ladders
1. Ground ladders
2. Specialty ladders
ii. Elevated platforms
iii. Mobile air stairs
iv. Forcible entry tools

2) Methods for advancing hand lines from the fire-fighting vehicle
a. Proper PPE and SCBA
b. Deployment of hand line(s)
c. Advancement of hand line(s)
d. Two-person team
e. Two in/two out rule
f. Awareness of hazards

3) Precautions to be followed when advancing hose lines to a fire
a. Do not impede passenger evacuation
b. Deploy hand line(s) in a safe area
c. Watch for sharp objects
d. Avoid flammable liquids
e. Be aware of hazards present
f. Potential backdraft, flashover, rollover, and smoke explosion occurrences

4) Observable results that fire stream has been applied
a. Steam from hose line application on a hot object (steam conversion)
b. Cooling
c. Fire knock down
d. Displacement of products of combustion

e. Smoke transformation

5) Dangerous structural conditions created by fire
   a. Missing structural components
   b. Fire/flame spread to concealed areas
   c. Instability
   d. Molten metals
   e. Collapses
   f. Weakened structural components

6) Principles of exposure protection
   a. Hand line(s) should be in place to protect unburned portions
   b. Protection of exposed or surrounding objects
   c. Adequate water supply
   d. Proper coverage to ensure cooling effect
   e. Wind direction

7) Potential long–term consequences of exposure to products of combustion
   a. Carcinogenic effects
   b. Respiratory damage
   c. Dermatological
   d. Product specific effects
      i. Composites
      ii. Fuels
      iii. Aircraft fluids

8) Physical states of matter in which fuels are found
   a. Solid
   b. Liquid
   c. Vapor

9) Common types of accidents or injuries and their causes
   a. Types
      i. Physical
      ii. Psychological
   b. Causes
      i. Inadequate training
      ii. Lack of critical incident stress management
      iii. Failure to comply with safety standards
      iv. Dangerous conditions

10) The role of the backup team in fire attack situations
   a. Two in/two out rule

i. Rescue of primary entry team (Rapid Intervention Team/RIT)
ii. Exterior support operations

b. Observing and communicating conditions

11) Attack and control techniques
   a. Point of entry
   b. Never impede egress of passengers
   c. Observe hottest area of fire
   d. Direct fire attack
   e. Indirect fire attack
   f. Cool exterior if entry is delayed
   g. Piercing appliances

12) Techniques for exposing hidden fires
   a. Ventilation
   b. Overhaul
   c. Thermal imagers
   d. Interior inspection
      i. Light ballasts
      ii. Galley area
      iii. Lavatories
      iv. Flight deck area
      v. Avionics
      vi. Cargo compartments
      vii. Electrical components

Requisite Skills: Deploy fire-fighting vehicle hand line on an interior aircraft fire; gain access to aircraft interior; open, close, and adjust nozzle flow and patterns; apply agent using direct, indirect and combination attacks; advance charged and uncharged hose lines up ladders and up and down interior and exterior stairways; and locate and suppress interior fires.

Instructor Note

200-A.4.3.4 This requirement can be met by using a structural burn facility that is configured to simulate the interior layout and dimensions of an aircraft fuselage and that contains mannequins to simulate victims. The mock-up should include at least three metal seats and training dummies to simulate victims. It is intended that the size of the aircraft be the largest type that normally uses the airport and that the hand line be appropriate to the size of the aircraft.

200-4.3.5 Attack an engine or auxiliary power unit/emergency power unit (APU/EPU) fire on an aircraft while operating as a member of a team, given approved PPE, an assignment, fire-fighting vehicle hand line or turret, a correct agent, and agent application procedures, so that agent application procedures are followed, the fire is extinguished, and the engine or APU/EPU is shut down.

Requisite Knowledge: Techniques for accessing the aircraft engines and APU/EPUs, operation of on-board aircraft fire-fighting systems and potential hazards, safety procedures, methods for advancing hand line from a fire-fighting vehicle, methods for operating turrets, and methods for shutting down engine and APU/EPU operation.

1) Techniques for accessing the aircraft engines and APU/EPUs
    a. Assessing the exterior prior to entry
        a. Blistering or peeling of paint
        b. Visible signs of compartment fire
        c. Engine fires
    b. Gaining access
        a. Hatches
        b. Cowlings
        c. Fire ports
    c. Access equipment
        a. Ladders
            i. Ground ladders
            ii. Specialty ladders
        b. Elevated platforms
        c. Mobile air stairs
        d. Forcible entry tools

2) Safety procedures
    a. Avoid intake
    b. Avoid exhaust
    c. Avoid propellers
    d. Engine/APU shut down

3) Methods for advancing hand line from a fire-fighting vehicle
    a. Proper PPE and SCBA
    b. Deployment of hand line(s)
        i. Reel lines
        ii. Preconnected hose lines
    c. Advancement of hand line(s)
    d. Two-person team
    e. Two in/two out rule
    f. Awareness of hazards

4) Methods for operating turrets
    a. Per manufacturer specification
    b. As per AHJ

5) Methods for shutting down engine and APU/EPU operation
    a. Engine
        i. By flight crew
            1. Fuel (throttles)
            2. On board extinguishing systems (bottles)
            3. Electrical (batteries)
        ii. By ARFF crew
            1. Fuel (throttles)
            2. On board extinguishing systems (bottles)
            3. Electrical (batteries)
    b. Auxiliary power unit (APU/EPU)
        i. By flight crew
            1. Fuel (throttles)
            2. On board extinguishing systems (bottles)
            3. Electrical (batteries)
        ii. By ARFF crew
            1. Flight deck
                a) Fuel (throttles)
                b) On board extinguishing systems (bottles)
                c) Electrical (batteries)
            2. External controls

a) Engine shut down
b) Extinguishing systems

Requisite Skills: Deploy and operate fire-fighting vehicle hand line, operate turrets, gain access to aircraft engine and APU/EPU, and shut down engine and APU.

Instructor Note

200-A.4.3.5 Shutting down the aircraft includes turning off engines/power units, electrical, and oxygen systems. Training and evaluation of the engine/APU shut down and activation of onboard aircraft fire-fighting systems can be accomplished using simulation on actual aircraft or mock-ups.

200-4.3.6 Attack a wheel assembly fire, as a member of a team, given PPE, a team, an assignment, an ARFF vehicle hand line, and correct agent, so that the fire is extinguished.

Requisite Knowledge: Agent selection and application procedure, special safety considerations, and the characteristics of combustible metals.

1) Agent selection and application procedure
    a. Agent selection
        i. Water
        ii. Class D extinguishing agents
        iii. Dry chemical
    b. Application procedure
        i. Mass application of water
        ii. Adequate amount of class D agent for encapsulation
        iii. Adequate amount of dry chemical for extinguishment
        iv. Conservation of agent

2) Special safety considerations
    a. Fusible plugs
    b. Proper approach
    c. Tire disintegration
    d. Wheel fragmentation
    e. Aircraft collapse

f. Appropriate utilization of PPE with SCBA
g. Hazardous or flammable fluid release
h. Engine intake
i. Engine exhaust

3) The characteristics of combustible metals
   a. High ignition point
   b. Intense pyrolysis
   c. Extreme heat
   d. Reactivity

Requisite Skills: Approach the fire in accordance with safety procedures; and select and apply agent.

200-4.3.7 Ventilate an aircraft through available doors and hatches while operating as a member of a team, given PPE an assignment, tools, and mechanical ventilation devices, so that openings are created, all ventilation barriers are removed, and the heat and other products of combustion are released.

Requisite Knowledge: Aircraft access points; principles, advantages, limitations, and effects of mechanical ventilation; the methods of heat transfer; the principles of thermal layering within an aircraft on fire; and the techniques and safety precautions for venting aircraft.

1) Aircraft access points
   a. Normal door operations
   b. Over wing access
   c. Cargo doors
   d. Hatches
   e. Breaks in structure of aircraft

2) Principles, advantages, limitations, and effects of mechanical ventilation
   a. Negative pressure ventilation
      i. Hydraulic
      ii. Gas powered fans
      iii. Electrical powered fans
   b. Positive pressure ventilation
      i. Gas powered fans
      ii. Electrical powered fans

3) The methods of heat transfer

a. Conduction
b. Convection
c. Radiation
d. Direct flame impingement

4) The principles of thermal layering within an aircraft on fire
   a. Smoke stratification
   b. Heat travel
      i. Vertical
      ii. Horizontal

5) The techniques and safety precautions for venting aircraft
   a. Techniques for venting aircraft
      i. Mechanical
         1. Positive pressure
         2. Negative pressure
      ii. Natural
         1. Horizontal
         2. Vertical
   b. Safety considerations for venting aircraft
      i. Flashover
      ii. Rollover
      iii. Backdraft
      iv. Smoke explosion

Requisite Skills: Operate doors, hatches, and forcible entry tools; operate mechanical ventilation devices; and remove barriers.

Instructor Note

200-A.4.3.7 Training and evaluation of this task can be accomplished using actual aircraft or mock-ups and smoke-generation devices used for training.

200-4.3.8 Replenish extinguishing agents while operating as a member of a team, given an assignment, a fire-fighting vehicle, a fixed or mobile water source, a supply of agent, and supply lines and fittings, so that agents are available for application by the fire-fighting vehicle within the time established by the authority having jurisdiction (AHJ).

Requisite Knowledge: Re-supply procedures during an incident and operation procedures for fire-fighting vehicle replenishment.

1) Re-supply procedures during an incident
    a. Water sources
        i. Airport water distribution system
        ii. Mobile water supply
        iii. Additional water supplies
    b. Water refill methods
        i. Direct connection
        ii. Overhead fill
    c. Foam re-supply
        i. Overhead gravity
        ii. Mechanical or hand foam concentrate transfer pump
        iii. 5-gallon container direct fill
    d. Auxiliary agent refill
        i. Knowledge of agent type
        ii. Follow manufacturers procedures
        iii. Service in a well ventilated area and utilize respiratory protection

2) Operation procedures for fire-fighting vehicle replenishment
    a. Per manufacturer specifications
    b. Procedures per AHJ

Requisite Skills: Connect hose lines and operate valves.

Instructor Note

200-A.4.3.8 **The replenishment task is time critical. Evaluating the proficiency potential of ARFF personnel to replenish the extinguishing agents on an ARFF vehicle requires that the AHJ evaluate several factors related to its own airport emergency plan in order to establish a fair benchmark for personnel. The following factors influence this time constraint:**

(1) Size of the ARFF vehicles' agent reservoirs

(2) Available replenishment methods and their agent flow capacities

(3) Proximity of replenishment means to the potential ARFF emergency locations in and around the airport

In making these evaluations, the AHJ must keep in mind that its overall objective is to ensure an adequate agent flow at the scene during an emergency. The following is an example of determining the replenishment time variable:

If the ARFF vehicle on the airport runway holds 1500 gal (5677L) of water and 150 gal (568 L) of AFFF, the replenishment means is a fixed water hydrant located at the midpoint of the runways. If the hydrant flow capacity is 250 gal (946 L/min) and if the average time to drive from the approach and departure end of any runway to the midpoint is 2 minutes, then a reasonable time to replenish a vehicle and return it to operation from the end of the runway is 18 minutes. This allows 2 minutes to drive to the hydrant, 4 minutes to connect to the hydrant, 7 minutes to fill the water tank, 3 minutes to disconnect from the hydrant, and 2 minutes to drive back to the end of the runway.

Instructor Note (Cont. 200-A.4.3.8)

This might be considered a reasonable amount of time to replenish the vehicle at this particular airport, if additional vehicles are available continue support at the emergency scene, but it might be entirely too slow for an airport where this ARFF vehicle is the only vehicle available to support an aircraft scene. In this case, the replenishment plan should be re-evaluated and adjusted to reduce the time required.

200-4.3.9 Preserve the aircraft accident scene, given an assignment and procedures, so that evidence is identified, protected, and reported according to procedures.

Requisite Knowledge: Airport emergency plan requirements for preservation of the scene, evidence identification, evidence protection, and evidence reporting procedures.

1) Airport emergency plan requirements for preservation of the scene
    a. Scene security
    b. Photographs
    c. Sketches or drawings
    d. Marking evidence locations

2) Evidence identification
    a. During the primary search of an aircraft accident site
        i. Life safety is the priority during this phase of the incident
        ii. Evidence protection is secondary
    b. During the secondary search of an aircraft accident site
        i. Protection of evidence should have priority
        ii. Since all the survivors should be rescued, slow down the search and protect evidence

3) Evidence protection
    a. National Transportation Safety Board (NTSB) regulations
        i. Removal of persons trapped or injured
        ii. Protect the aircraft from further damage
        iii. Protect the public from injury
    b. Secure the scene

c. Document the moving of evidence
d. Secure and protect the flight data recorder (FDR) or cockpit voice recorder (CVR)
e. Special care should be taken in certain areas
    i. In the cockpit or control areas
    ii. Areas of primary structural failure or damage

4) Evidence reporting procedures
    a. Documentation
        i. Responder statements
        ii. Witness statements
        iii. Incident reporting
        iv. Photographs
        v. Maps
    b. Discuss the relationships between various aircraft parts and occupants

Requisite Skills: Preserve the scene for investigators, and identify, protect, and report evidence.

200-4.3.10 Overhaul the accident scene, given PPE, an assignment, hand lines, and property conservation equipment, so that all fires are located, exposed, and extinguished and all property is protected from further damage.

Requisite Knowledge: Methods of complete extinguishment and prevention of re-ignition, reasons for conservation, operating procedures for property conservation equipment, overhaul procedures, signs of a hidden fire, methods of detecting hidden fires, and tools and equipment used for overhaul.

1) Methods of complete extinguishment and prevention of re-ignition
    a. Thermal imaging cameras/Forward Looking Infra-Red (TIC/FLIR)
    b. Overhaul
    c. Secure aircraft operating systems
    d. Vapor suppression

2) Reasons for conservation
    a. Scene stabilization
    b. Evidence protection
    c. NTSB investigation

3) Operating procedures for property conservation equipment
    a. Deployment of loss control systems
    b. As per manufacturer's specifications

4) Overhaul procedures
    a. Appropriate agency authorization
    b. Use of PPE including SCBA
    c. Aircraft stabilization
    d. Air quality monitoring
    e. Hazardous materials considerations
    f. Hand line protection
    g. Evidence protection
    h. Hot spots located
    i. Extinguishment and cooling
    j. Pressurized systems identified
    k. Void spaces opened or pierced

5) Signs of a hidden fire
    a. Smoke
    b. Steam
    c. Thermal imaging cameras/Forward Looking Infra-Red (TIC/FLIR)

6) Methods of detecting hidden fires
    a. Smoke
    b. Steam
    c. Thermal imaging cameras/Forward Looking Infra-Red (TIC/FLIR)

7) Tools and equipment used for overhaul
    a. PPE/SCBA
    b. Hand line
    c. Thermal imaging cameras/Forward Looking Infra-Red (TIC/FLIR)
    d. Forcible entry tools
    e. Air monitors

Requisite Skills: Use property conservation equipment; detect hidden fires, and use tools and equipment to expose hidden fires.

Instructor Note

200-A.4.3.10 It is known that during overhaul, Fire Fighters remove their respiratory protective equipment and as a result, expose themselves to probable contamination by carcinogens, toxic substances, and so forth. Respiratory protective equipment should be worn during overhaul and all PPE should be washed down after exposure in any incident involving fire.

200-4.4 Rescue

This duty involves gaining access to an aircraft and assisting in the evacuation process, performing disentanglement, and initial triage.

Instructor Note

200-A.4.4 One of the primary tasks of rescue operations is for the airport fire fighter to maintain a habitable environment around the fuselage and to assist with aircraft evacuation by stabilizing slide chutes and assisting and controlling the evacuees.

200-4.4.1 Gain access into and out of an aircraft through normal entry points and emergency hatches, secure and shut down the aircraft, and assist in the evacuation process while operating as a member of a team, given PPE and an assignment, so that passenger evacuation and rescue can be accomplished.

Requisite Knowledge: Aircraft familiarization, including materials used in construction, aircraft terminology, automatic explosive devices, hazardous areas in and around aircraft, aircraft egress/ingress (hatches, doors, and evacuation chutes), military aircraft systems and associated hazards; capabilities and limitations of manual and power rescue tools and specialized high-reach devices, aircraft shutdown and safety procedures.

1) Aircraft familiarization
    a. General aviation
    b. Commercial
    c. Military

2) Materials used in construction
    a. Aluminum/aluminum alloys
    b. Steel
    c. Magnesium/magnesium alloys
    d. Titanium
    e. Advanced aerospace (composite) materials
    f. Wood

3) Aircraft terminology
    a. Fixed wing
    b. Rotary wing

4) Automatic explosive devices
    a. Ejection seats
    b. Canopy removers
    c. Initiators
    d. Rotary actuators
    e. Thrusters
    f. Explosive squibs
    g. Seat catapults
    h. Ballistic recovery system (BRS)

5) Hazardous areas in and around aircraft
    a. Wings
        i. Fuel leaks and spills
        ii. Weapons/missiles/rockets
        iii. Pinching hazards
        iv. No step areas – flight control surfaces
        v. Anti-icing systems
    b. Engines
        i. Fuel leaks and spills
        ii. Propellers
        iii. Jet engines
            1. intake
            2. exhaust
    c. Fuselage
        i. Radar systems
        ii. Appendages
        iii. Overheated wheel assemblies
        iv. Tire/wheel failures
        v. Evacuation slides

d. Tail
    i. Engine or APU fires
    ii. Tail cones
    iii. Evacuation slides
e. General hazards
    i. Electrocution hazards
    ii. Composites
    iii. Aircraft hazardous materials
    iv. Aircraft cargo hazards

6) Aircraft egress/ingress (hatches, doors, and evacuation chutes)
    a. Aircraft doors
    b. Aircraft hatches
    c. Rear stairs
    d. Tail-cone jettison
    e. Escape slides
    f. Emergency exits
    g. Hatches
    h. Windows
    i. Fuselage breach

7) Military aircraft systems and associated hazards
    a. Fire protection/detection systems
    b. Ejection systems
    c. Weapon systems
    d. Exotic fuels

8) Capabilities and limitations of manual and power rescue tools and specialized high-reach devices
    a. Flammable atmosphere
    b. Stability of aircraft
    c. Hands-on training
    d. Safety standards apply
    e. Hand tools
    f. Power tools
        i. Electric
        ii. Hydraulic
        iii. Pneumatic
    g. Lifting and pulling tools

9) Aircraft shutdown and safety procedures

a. Fuel cutoff/throttle
b. Fire shutoff “T” or “L” handles
c. Battery switch/disconnect

Requisite Skills: Operate power saws and cutting tools, hydraulic devices, pneumatic devices, and pulling devices; operate specialized ladders and high-reach devices; secure aircraft safety and shutdown.

Instructor Note

200-A.4.4.1 Securing the aircraft can include chocking/pinning the landing gear, safety ejection/ballistic chute systems, canopies, and safety weapon systems. Shutting down the aircraft includes turning off engines/power units, electrical, and oxygen systems. Training and evaluation of these tasks can be accomplished using simulation on actual aircraft or mockups.

200-4.4.2 Locate and disentangle an entrapped person from an aircraft as a member of a team, given approved PPE, a team, an assignment, and rescue tools, so that the person is freed from entrapment without undue further injury and hazards are managed.

Requisite Knowledge: Capabilities and limitations of rescue tools, search procedures, hazard identification, and control methods.

1) Capabilities and limitations of rescue tools
   a. Flammable atmosphere
   b. Stability of aircraft
   c. Hands-on training
   d. Safety standards apply
   e. Hand tools
   f. Power tools
      i. Electric
      ii. Hydraulic
      iii. Pneumatic
   g. Lifting and pulling tools

2) Search procedures

a. Exterior search
b. Interior search
c. Two in/two out rule
d. Rescue of survivors
e. Primary search
f. Secondary search
g. Preservation of evidence

3) Hazard identification
   a. Aircraft hazardous/flammable materials
   b. Aircraft dangerous goods
   c. Post-crash aircraft hazards
      i. Fire
      ii. Electrical
      iii. Disrupted aircraft systems
      iv. Biohazard
      v. Debris
      vi. Hazardous materials
      vii. Military aircraft hazards

4) Control methods
   a. Safety
   b. Isolation
   c. Insulation
   d. Extinguishment

Requisite Skills: Perform search procedures, control hazards, remove victims, and operate rescue tools.

Instructor Note

200-A.4.4.2 Training and evaluation of this task can be accomplished using actual aircraft or mock-ups.

200-4.4.3 Implement initial triage of the victims of an aircraft accident, given PPE, an assignment, and the triage protocol of the AHJ, so that each victim is evaluated and correctly categorized according to protocol.

Requisite Knowledge: Categories of triage according to the triage protocol of the AHJ, and methods of assessment.

1) Categories of triage according to the triage protocol of the AHJ

2) Methods of assessment
    a. START – simple triage and rapid treatment
    b. As per AHJ

Requisite Skills: Triage patients per protocol.

REFERENCE LIST FOR THE BASIC AIRCRAFT RESCUE FIRE SUPPRESSION CURRICULUM

This Reference List is provided as a general guide for both instructors and students to locate information pertaining to the specific objectives in the TCFP Curriculum. This list is not all inclusive and does not in any way limit TCFP development and use of questions to test the objectives of the curriculum:

Required References

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AC 150/5210-17C, Programs for Training of Aircraft Rescue and Firefighting Personnel. June 12, 2015: www.airweb.faa.gov

Aircraft Rescue and Fire Fighting. (6th edition) (2015). Stillwater, OK: Fire Protection Publications. International Fire Service Training Association (IFSTA)

Code of Federal Regulations, 14 CFR, Part 139, Subpart A, Certification of Airports: General. (Amended January 16, 2013). U.S. Department of Transportation, Federal Aviation Administration http://www.ecfr.gov/cgi-bin/text-idx?c=ecfr;sid=18b73eada8afcb53ac77dc25df9390cb;rgn=div5;view=text;node=14%3A3.0.1.1.14;idno=14;cc=ecfr

Code of Federal Regulations, 14 CFR, Part 139, Subpart D, Certification of Airports: Operations. (Amended January 16, 2013). U.S. Department of Transportation, Federal Aviation Administration http://www.ecfr.gov/cgi-bin/text-idx?c=ecfr;sid=18b73eada8afcb53ac77dc25df9390cb;rgn=div5;view=text;node=14%3A3.0.1.1.14;idno=14;cc=ecfr

Code of Federal Regulations, 14 CFR, Part 139.311 Marking, signs and lighting. (Amended January 16, 2013). U.S. Department of Transportation, Federal Aviation Administration http://www.ecfr.gov/cgi-bin/text-idx?c=ecfr;sid=18b73eada8afcb53ac77dc25df9390cb;rgn=div5;view=text;node=14%3A3.0.1.1.14;idno=14;cc=ecfr

~~*Code of Federal Regulations, 14 CFR, Part 139.325 Airport emergency plan*~~. (~~Amended January 16, 2013~~). U.S. Department of Transportation, Federal Aviation Administration ~~http://www.ecfr.gov/cgi-bin/text-idx?c=ecfr;sid=18b73eada8afcb53ac77dc25df9390cb;rgn=div5;view=text;node=14%3A3.0.1.1.14;idno=14;cc=ecfr~~

~~*Code of Federal Regulations, 14 CFR, Part 139.329, Pedestrians and ground vehicles.*~~ (~~Amended January 16, 2013~~). U.S. Department of Transportation, Federal Aviation Administration ~~http://www.ecfr.gov/cgi-bin/text-idx?c=ecfr;sid=18b73eada8afcb53ac77dc25df9390cb;rgn=div5;view=text;node=14%3A3.0.1.1.14;idno=14;cc=ecfr~~

Code of Federal Regulations, 49 CFR, Part 175.310 Transportation of flammable liquid fuel; aircraft only means of transportation. (October 1, 2011 edition). U.S. Department of Transportation, Pipeline and Hazardous Materials Safety Administration ~~https://www.gpo.gov/fdsys/granule/CFR-2011-title49-vol2/CFR-2011-title49-vol2-sec175-310~~

Code of Federal Regulations, 49 CFR, Part 830.10 Preservation of aircraft wreckage, mail, cargo, and records. (~~October 1, 2006~~ August 24, 2010 edition). U.S. Department of Transportation, National Transportation Safety Board ~~https://www.gpo.gov/fdsys/granule/CFR-2006-title49-vol7/CFR-2006-title49-vol7-sec830-10~~

Certification Curriculum Manual. Texas Commission on Fire Protection. (Most current edition). Austin, TX: Texas Commission on Fire Protection.

Essentials of Fire Fighting and Fire Department Operations. (7~~6~~th edition) (2018~~3~~). Stillwater, OK: Fire Protection Publications. International Fire Service Training Association (IFSTA)

~~National Transportation Safety Board Accident Reports, http://www.ntsb.gov.~~

~~*NFPA 402: Aircraft Rescue and Fire-Fighting Operations*. (2013 edition). NFPA Publications Quincy, MA. National Fire Protection Association~~

NFPA 1003: Standard for Airport Fire Fighter Professional Qualifications. (2019~~5~~ edition). NFPA Publications Quincy, MA: NFPA Publications. National Fire Protection Association

NFPA 1403: Standard on Live Fire Training Evolutions. (2018~~2~~ edition). NFPA Publications Quincy, MA. National Fire Protection Association

NFPA 1500: Standard on Fire Department Occupational Safety and Health Program. (2021~~13~~ edition). NFPA Publications Quincy, MA: NFPA Publications. National Fire Protection Association

Recommended References

The most current edition of the following publications is recommended (not required) supplemental material for program use.

~~*150/5230-4B – Aircraft Fuel Storage, Handling, Training, and Dispensing on Airports*. Sept. 28, 2012.~~
~~http://www.faa.gov/documentLibrary/media/Advisory_Circular/150_5230_4b.pdf~~

ARFF Vehicle and High Reach Extendable Turret AC 150/5210-23. Sept 30, 2010
~~http://www.faa.gov/documentLibrary/media/Advisory_Circular/150_5210_23.pdf~~

Ballistic recovery systems (BRS) FAA 13-04 cert alert "Additional Precautions for Approaching Aircraft with Ballistic Parachutes, Ejection Seats, and Airbags." July 29, 2013. ~~https://www.faa.gov/airports/airport_safety/certalerts/media/cert1304.pdf~~

~~*Commercial Aviation Alternative Fuels Initiative.* Information on biodiesel/alternative fuels: http://www.caafi.org/~~

~~Department of Defense Nuclear Accident National Defense Area guidance
http://www.au.af.mil/au/awc/awcgate/dod/d523016p.pdf~~

~~*Diesel particulate filter (DPF) regeneration*
https://www.iafc.org/files/1EVM/FAMA_EmerVehEmissionsSysGuide.pdf~~

FAA Advisory Circular AC120-60B (anti-icing, de-icing isolation). December 20, 2004.
~~https://www.faa.gov/regulations_policies/advisory_circulars/index.cfm/go/document.information/documentID/23199~~

~~*International Association for Disaster Preparedness and Response (DERA) guide for responding to a military aircraft crash*
http://www.disasters.org/dera/library/ACCIDENT.PDF~~

~~National Defense Area (Department of Defense)
Official definition: http://www.dtic.mil/doctrine/new_pubs/jp1_02.pdf~~

National Transportation Safety Board Accident Reports, http://www.ntsb.gov.

Pumping and Aerial Apparatus Driver/Operator Handbook. (3rd edition) (20154). Stillwater, OK: Fire Protection Publications. International Fire Service Training Association.

~~*Sustainable Alternative Jet Fuels*~~
~~https://www.faa.gov/about/office_org/headquarters_offices/apl/research/alternative_fuels/~~

Unmanned aircraft/drones UAV/UAS
https://www.faa.gov/uas/

USAF TO 00-105E-9 Aerospace Emergency Rescue and Mishap Response Information (Emergency Services). Current Edition April 2015 Revision Number 16.
~~http://legacy.dodffcert.com/00-105e-9/~~

~~[For additional information on solid fuels]~~
~~*Fire Investigator: Principles and Practices*. (4th edition) (2016). Burlington, MA: Jones and Bartlett Learning. pp. 371-372. See also: *Essentials of Fire Fighting and Fire Department Operations.* (6th edition) (2013). Stillwater, OK: Fire Protection Publications. International Fire Service Training Association (IFSTA) pp. 228-230.~~

EQUIPMENT LIST

Personal Protective Equipment

- A complete NFPA 1971-compliant firefighter protective ensemble per student
- Self-contained breathing apparatus (SCBA)

Communications Equipment

- Two-way radio
- Light Gun (ATC)

SOP/MOP/SOG/PP:

- Airport/FD/Organizational Incident-Specific Response SOPs
- Incident Management Protocol
- Airport Emergency Plan (actual or training version)
- Airport Grid Map
- Aircraft schematics/diagrams
- AHJ Triage Protocol
- Fire attack procedures
- SDS for each extinguishing agent

Access to ATC (or a simulated ATC)

- Radio communication
- Light-gun signals

Training Devices/Props/Simulators

- Aircraft firefighting simulator (interior and exterior)
- Aircraft fuel spill tank/containment area (burn pan or equivalent)
- APU/EPU prop or equivalent
- Wheel assembly fire prop or equivalent

Vehicles

- ARFF vehicles for assigned aircraft
- ARFF vehicle with 250 gpm minimum turret
- Support vehicles per AHJ

Training Extinguishing Agents

- Approved Extinguishing agents as required by aircraft
- Charged and staffed handline

Tools and Equipment

- Electric hand lanterns and portable lighting

- Tube cutter (used to disarm ejection seats – per AHJ)
- Insulated cutter rated with an insulation resistance of 20,000 volts
- Mechanical ventilation device
- Pry axe
- Rotary powered saw
- Harness cutters
- Powered rescue tools (battery-powered, pneumatic, and/or hydraulic)
- Portable fire extinguishers (as needed)
- ~~Powered saws~~
- Cutting tools
- ~~Hydraulic rescue tools~~
- Pulling device
- ~~Pneumatic cutter~~
- Mechanical ventilation device
- Ladders
- Rescue mannequin
- Simulated victims
- Triage tags
- Thermal Imager
- Property conservation equipment
- ~~Ladders~~
- Simulated debris field
- Heat source
- High reach device (airstairs)

10. Matters referred from the Fire Fighter Advisory Committee (FFAC), including, but not limited to:

B. Report from the Curriculum and Testing Committee regarding possible changes to the Certification Curriculum Manual as follows:

b. Basic Fire Inspector Curriculum

CERTIFICATION CURRICULUM MANUAL

CHAPTER FOUR

FIRE INSPECTOR

NFPA 1031, 2014 Edition

Effective June 1, 2016

Texas Commission on Fire Protection
P.O. Box 2286 Austin, Texas 78768-2286 (512) 936-3838

CHAPTER 4
BASIC FIRE INSPECTOR
CURRICULUM OUTLINE

(The Fire Inspector I and II curricula are to be completed for the Fire Inspector certification)

FIRE INSPECTOR I		
SECTION	SUBJECT	RECOMMENDED HOURS
401-4.1	General	1
401-4.2	Administration	8
401-4.3	Field Inspection	81
401-4.4	Plans Review	0
FIRE INSPECTOR II		
SECTION	SUBJECT	RECOMMENDED HOURS
402-5.1	General	1
402-5.2	Administration	4
402-5.3	Field Inspection	57
402-5.4	Plans Review	8
	TOTAL RECOMMENDED HOURS	**156**

The recommended hours include time for skills evaluation and is based on 12 students. Hours needed depends on the actual number of students.

REFERENCE LIST FOR THE BASIC FIRE INSPECTOR CURRICULUM

Certified Training Facilities approved to teach this curriculum must have the following reference materials:

Emergency Response Guidebook, (current edition). U.S. Department of Transportation

Fire Inspection and Code Enforcement (8th ed.) (2016). Stillwater, OK: Fire Protection Publications. International Fire Service Training Association.

Hazardous Materials for First Responders (5th Ed.) (2017). Stillwater, OK: Fire Protection Publications. International Fire Service Training Association.

Local Codes and Standards.

NFPA 1031: Standard for Professional Qualifications for Fire Inspector and Plan Examiner (2014 ed.). Quincy, MA: National Fire Protection Association. NFPA Publications.

*NFPA 472: Standard for Competence of Responders to Hazardous Materials/Weapons of Mass Destruction Incidents (*2013 ed.). Quincy, MA: National Fire Protection Association. NFPA Publications.

Standards Manual for Fire Protection Personnel. Austin, TX: Texas Commission on Fire Protection.

Course Instructor Information
Basic Fire Inspector

Overview

The Fire Inspector curriculum is designed to provide clear guidance that ensures adequate presentation of the information required to meet the Job Performance Requirements (JPRs) of the National Fire Protection Association (NFPA) 1031, *Standard for Professional Qualifications for Fire Inspector and Plan Examiner*, 2014 Edition.

The Fire Inspector curriculum is chapter 4 of the Texas Commission on Fire Protection (TCFP) Curriculum Manual.

To qualify for the Fire Inspector certification, the Fire Inspector I and II curricula must be completed.

~~To qualify for the Plan Examiner I certification, only the Plan Examiner I curriculum must be completed.~~

~~If a student completed training under the Fire Inspector with Plan Examiner I curriculum (offered prior to March 1, 2019), the student is eligible for both the Fire Inspector and Plan Examiner I certification if all sections of the exam are passed. If the student passes only the Inspector I and II sections of the exam, the student is only eligible for the Fire Inspector certification.~~

Certification Level	TCFP Section Number	NFPA 1031 Chapter
Fire Inspector I	401	4
Fire Inspector II	402	5
~~Plan Examiner I~~	~~470~~	~~7~~

Layout

The NFPA numbering sequence is mirrored to allow easy correlation between this document and the NFPA standard. For example, 401-4.2.1 identifies the section in TCFP's Fire Inspector curriculum that corresponds to NFPA section 4.2.1.

NFPA Appendix Information

When a section references information from "Annex A Explanatory Material" in the NFPA standard, it is identified by adding an "A" to the section number. For example, 401-A.4.2.5 identifies the section in Inspector I that corresponds to NFPA Annex A information for NFPA section 4.2.5.

TCFP Standards Manual
It is critical that the course instructor review the chapters in the TCFP Standards Manual that apply to this curriculum. Of primary importance are the following chapters:

- Chapter 421, Standards for Certification
- Chapter 437, Fees
- Chapter 429, Fire Inspector Certification
- Chapter 439(e)(2), Examinations
- Chapter 449.5, Certification as Head of a Prevention Only Department

These chapters do not address every issue that could impact this curriculum. Therefore, the course instructor is encouraged to become familiar with the TCFP Standards Manual.

Supplemental Information
Instructors are expected to provide supplemental information if the main reference (textbook) does not provide adequate information to ensure successful completion of the JPRs as listed in the curriculum.

Components of the Curriculum
Each section of the curriculum identifies the NFPA JPR and subdivides the requisite knowledge requirements into learning components. For example:

Curriculum	Explanation
401-4.2.6 Participate in legal proceedings, given the findings of a field inspection or a complaint and consultation with legal counsel, so that all information is presented and the inspector's demeanor is professional.	Section number and NFPA JPR
Requisite Knowledge: The legal requirements pertaining to evidence rules in the legal system, types of legal proceedings.	Requisite knowledge statement
1. The legal requirements pertaining to evidence rules in the legal system a. Texas Rules of Evidence	First part of requisite knowledge
2. Types of legal proceedings a. Appeals i. Appeals boards ii. Appeals hearings b. Criminal c. Civil	Second part of requisite knowledge
Requisite Skills: The ability to maintain a professional courtroom demeanor, communicate, listen, and differentiate facts from opinions.	Requisite skills statement

Skills
NFPA requisite skill requirements are address in the corresponding skill sheets. The skills are combined depending on whether the skill relates to General, Field Inspection, Administration, or Plans Review.

Levels of Certification
The Fire Inspector I conducts basic fire inspections and applies codes and standards.

The Fire Inspector II conducts most types of inspections and interprets applicable codes and standards.

~~The Plan Examiner I analyzes building construction, hazardous processes and architectural drawings or plans to ensure compliance with building and fire codes.~~

EQUIPMENT LIST

Inspector I

Pitot tube and gauge
Conversion chart
Hydrant
Hydrant wrench
Fire flow test graph with required information provided
Applicable Codes and Standards
Access to existing fire detection and alarm systems
Portable fire extinguisher

Inspector II

Specific permit application form
Specific plan review application form
Complex complaint
Local and state laws and ordinances
Example of legal instrument for adopting or modifying the code
Example of policies and procedures for adopting or modifying the code
Example of local policies and procedures
Example of organizational management goals
Diagram and description of a multi-use building
Example of approved plans
Building plans or field observations from a building
Facility or facility information with a fire protection system
System plans and specification documentation
Sprinkler system shop drawings and specification documentation that includes deficiencies
Example of emergency plan
Hazard observations or plans
Examples of performance based design (construction) documents
Example of operation and maintenance manual
Examples of applicable design data
Examples of type 5 construction plans
Example of floor plan of a building or portion of a building
Inspection forms
Measuring tools
Flashlight

~~Plan Examiner I~~

~~Examples of specific observations from a plan review~~
~~Examples of specific plans and specifications~~
~~Examples of specific management objective~~
~~Examples of specific plan review fire protection issue~~
~~Examples of specific plan review findings and legal consultation brief~~
~~Examples of specific plan submittal~~

10. Matters referred from the Fire Fighter Advisory Committee (FFAC), including, but not limited to:

B. Report from the Curriculum and Testing Committee regarding possible changes to the Certification Curriculum Manual as follows:

c. Plan Examiner Curriculum

CERTIFICATION CURRICULUM MANUAL

CHAPTER FOUR

PLAN EXAMINER

NFPA 1031, 2014 Edition

Effective June 1, 2016

Texas Commission on Fire Protection
P.O. Box 2286 Austin, Texas 78768-2286 (512) 936-3838

CHAPTER 4
PLAN EXAMINER
CURRICULUM OUTLINE

(Only the Plan Examiner I curriculum is required for the PE1 certification)

PLAN EXAMINER I		
SECTION	SUBJECT	RECOMMENDED HOURS
470-7.1	General	1
470-7.2	Administration	6
470-7.3	Plans Review	29/33
	TOTAL RECOMMENDED HOURS	**40**

The recommended hours include time for skills evaluation and is based on 12 students. Hours needed depends on the actual number of students.

REFERENCE LIST FOR THE PLAN EXAMINER CURRICULUM

Certified Training Facilities approved to teach this curriculum must have the following reference materials:

Emergency Response Guidebook, (current edition). U.S. Department of Transportation

Fire Inspection and Code Enforcement (8th ed.) (2016). Stillwater, OK: Fire Protection Publications. International Fire Service Training Association.

Hazardous Materials for First Responders (5th Ed.) (2017). Stillwater, OK: Fire Protection Publications. International Fire Service Training Association.

Local Codes and Standards.

NFPA 1031: Standard for Professional Qualifications for Fire Inspector and Plan Examiner (2014 ed.). Quincy, MA: National Fire Protection Association. NFPA Publications.

*NFPA 472: Standard for Competence of Responders to Hazardous Materials/Weapons of Mass Destruction Incidents (*2013 ed.). Quincy, MA: National Fire Protection Association. NFPA Publications.

Plans Examiner for Fire and Emergency Services (2nd ed.) (2016). Stillwater, OK: Fire Protection Publications. International Fire Service Training Association.

Standards Manual for Fire Protection Personnel. Austin, TX: Texas Commission on Fire Protection.

Course Instructor Information

Plan Examiner

Overview
The Plan Examiner curriculum is designed to provide clear guidance that ensures adequate presentation of the information required to meet the Job Performance Requirements (JPRs) of the National Fire Protection Association (NFPA) 1031, *Standard for Professional Qualifications for Fire Inspector and Plan Examiner*, 2014 Edition.

The following items are included in Chapter 4 of this curriculum manual:

- Course Instructor Information
- Reference List (textbooks and other recommended course materials)
- Course Outline (establishes the recommended hours for teaching this course)

This is a voluntary (non-mandatory) certification, therefore **a formal "curriculum is not provided. Please** use chapter 7 of NFPA 1031 as a guide when creating your own course curriculum.

Performance skills are available in Chapter 4 of the Plan Examiner Skills Manual.

~~The Plan Examiner curriculum is chapter 4 of the Texas Commission on Fire Protection (TCFP) Curriculum Manual.~~

To qualify for the Plan Examiner I certification, only the Plan Examiner I curriculum must be completed.

~~If a student completed training under the Fire Inspector with Plan Examiner I curriculum (offered prior to March 1, 2019), the student is eligible for both the Fire Inspector and Plan Examiner I certification if all sections of the exam are passed. If the student passes only the Inspector I and II sections of the exam, the student is only eligible for the Fire Inspector certification.~~

Certification Level	TCFP Section Number	NFPA 1031 Chapter
~~Fire Inspector I~~	~~401~~	~~4~~
~~Fire Inspector II~~	~~402~~	~~5~~
Plan Examiner I	470	7

Layout
The NFPA numbering sequence is mirrored to allow easy correlation between this document and the NFPA standard. For example, 401-4.2.1 identifies the section in TCFP's Fire Inspector curriculum that corresponds to NFPA section 4.2.1.

NFPA Appendix Information
When a section references information from "Annex A Explanatory Material" in the NFPA standard, it is identified by adding an "A" to the section number. For example, 401-A.4.2.5 identifies the section in Inspector I that corresponds to NFPA Annex A information for NFPA section 4.2.5.

TCFP Standards Manual
It is critical that the course instructor review the chapters in the TCFP Standards Manual that apply to this curriculum. Of primary importance are the following chapters:

- Chapter 421, Standards for Certification

- Chapter 437, Fees
- Chapter 429, Fire Inspector Certification
- Chapter 439(e)(2), Examinations
- Chapter 449.5, Certification as Head of a Prevention Only Department

These chapters do not address every issue that could impact this curriculum. Therefore, the course instructor is encouraged to become familiar with the TCFP Standards Manual.

Supplemental Information
Instructors are expected to provide supplemental information if the main reference (textbook) does not provide adequate information to ensure successful completion of the JPRs as listed in the curriculum.

Components of the Curriculum
Each section of the curriculum identifies the NFPA JPR and subdivides the requisite knowledge requirements into learning components. For example:

Curriculum	Explanation
401-7.3.1 Identify the requirements for fire protection or a life safety system, given a set of plans, so that deficiencies are identified, documented, and reported in accordance with the policies and procedures of the jurisdiction.	Section number and NFPA JPR
Requisite Knowledge: Applicable code requirements for life safety systems, interior finish, and third-party testing and evaluation.	Requisite knowledge statement
1. Applicable code requirements for life safety systems.	First part of requisite knowledge
2. Applicable code requirements for interior finish.	Second part of requisite knowledge
3. Applicable code requirements for third-party testing and evaluation.	Third part of requisite knowledge
Requisite Skills: The ability to read basic floor plans or shop drawings and identify symbols used and apply codes and standards.	Requisite skills statement

Skills
NFPA requisite skill requirements are address in the corresponding skill sheets. The skills are combined depending on whether the skill relates to General, Field Inspection, Administration, or Plans Review.

Level(s) of Certification

The Plan Examiner I analyzes building construction, hazardous processes and architectural drawings or plans to ensure compliance with building and fire codes.

EQUIPMENT LIST

~~Inspector I~~

~~Pitot tube and gauge~~
~~Conversion chart~~
~~Hydrant~~
~~Hydrant wrench~~
~~Fire flow test graph with required information provided~~
~~Applicable Codes and Standards~~
~~Access to existing fire detection and alarm systems~~
~~Portable fire extinguisher~~

~~Inspector II~~

~~Specific permit application form~~
~~Specific plan review application form~~
~~Complex complaint~~
~~Local and state laws and ordinances~~
~~Example of legal instrument for adopting or modifying the code~~
~~Example of policies and procedures for adopting or modifying the code~~
~~Example of local policies and procedures~~
~~Example of organizational management goals~~
~~Diagram and description of a multi-use building~~
~~Example of approved plans~~
~~Building plans or field observations from a building~~
~~Facility or facility information with a fire protection system~~
~~System plans and specification documentation~~
~~Sprinkler system shop drawings and specification documentation that includes deficiencies~~
~~Example of emergency plan~~
~~Hazard observations or plans~~
~~Examples of performance based design (construction) documents~~
~~Example of operation and maintenance manual~~
~~Examples of applicable design data~~
~~Examples of type 5 construction plans~~
~~Example of floor plan of a building or portion of a building~~
~~Inspection forms~~
~~Measuring tools~~
~~Flashlight~~

Plan Examiner I

Examples of specific observations from a plan review
Examples of specific plans and specifications
Examples of specific management objective
Examples of specific plan review fire protection issue
Examples of specific plan review findings and legal consultation brief
Examples of specific plan submittal

11. 37 Tex. Administrative Code, Part 13, Chapter 435, Fire Fighter Safety regarding After Action reports for Mayday events.

CHAPTER 435

FIRE FIGHTER SAFETY

§435.1. Protective Clothing.

(a) A regulated fire department shall:

(1) purchase, provide, and maintain a complete set of protective clothing for all fire protection personnel who would be exposed to hazardous conditions from fire or other emergencies or where the potential for such exposure exists. A complete set of protective clothing shall consist of garments including bunker coats, bunker pants, boots, gloves, helmets, and protective hoods, worn by fire protection personnel in the course of performing fire-fighting operations;

(2) ensure that all protective clothing which are used by fire protection personnel assigned to fire suppression duties comply with the minimum standards of the National Fire Protection Association suitable for the tasks the individual is expected to perform. The National Fire Protection Association standard applicable to protective clothing is the standard in effect at the time the entity contracts for new, rebuilt, or used protective clothing; and

(3) maintain, provide to the commission upon request, and comply with a departmental standard operating procedure regarding the use, selection, care, and maintenance of protective clothing which complies with NFPA 1851, Standard on Selection, Care, and Maintenance of Structural Fire Fighting Protective Ensembles.

(b) To ensure that protective clothing for fire protection personnel continues to be suitable for assigned tasks, risk assessments conducted in accordance with NFPA 1851 shall be reviewed and revised as needed, but in any case, not more than five years following the date of the last risk assessment.

§435.3. Self-Contained Breathing Apparatus.

The employing entity shall:

(1) purchase, provide, and maintain a complete self-contained breathing apparatus for each on-duty fire protection personnel who engage in operations where IDLH atmospheres may be encountered, where the atmosphere is unknown or would be exposed to hazardous atmospheres from fire or other emergencies or where the potential for such exposure exists;

(2) ensure that all self-contained breathing apparatus used by fire protection personnel complies with the minimum standards of the National Fire Protection Association identified in NFPA 1981, Standard on Open-Circuit Self-Contained Breathing Apparatus for Fire Fighters;

(A) the National Fire Protection Association standard applicable to a self-contained breathing apparatus is the standard in effect at the time the entity contracts for new, rebuilt, or used self-contained breathing apparatus;

(B) an entity may continue to use a self-contained breathing apparatus in use or contracted for before a change in the National Fire Protection Association standard, unless the commission determines that the continued use of the self-contained breathing apparatus constitutes an undue risk to the wearer, in which case the commission shall order that the use be discontinued and shall set an appropriate date for compliance with the revised standard;

(3) develop an air quality program that complies with the most recent edition of the NFPA 1989 Standard on Breathing Air Quality for Emergency Services Respiratory Protection;

(4) maintain and supply upon request by the commission, records and reports documenting compliance with commission requirements concerning self-contained breathing apparatus and breathing air. Records of all tests shall be made and the records shall be retained for a period of no less than three years;

(5) maintain and provide upon request by the commission, a departmental standard operating procedure regarding the use of self-contained breathing apparatus; and

(6) maintain and provide upon request by the commission, a department standard operating procedure regarding the selection, care, and maintenance of self-contained breathing apparatus that complies with the most recent edition of the NFPA 1852 Standard on Selection, Care, and Maintenance of Open-Circuit Self-Contained Breathing Apparatus (SCBA).

§435.5. Commission Recommendations.

The commission recommends that all employing entities use as a guide the following publications:

(1) NFPA 1403 "Live Fire Training Evolutions";

(2) NFPA 1500 "Fire Department Occupational Safety and Health Program;"

(3) IAFF/IAFC - "Fire Service Joint Labor Management Wellness-Fitness Initiative."

§435.7. Fire Department Staffing Studies.

(a) Section 419.022(a)(4) Texas Government Code provides that the commission may on request, assist in performing staffing studies of fire departments. Staffing studies must take into consideration all the objectives and missions of the fire department. Many staffing studies have been developed that can be used to assist in evaluating the needs of a fire department.

(b) A city should ultimately decide on the level of fire protection it is willing to provide to its citizens. The city and fire department should, as a minimum, address the needs of prevention, investigation and suppression as outlined in the appropriate National Fire Protection Association Standards. That decision should be based on facts, the safety of its citizens, and the safety of the fire fighters providing that protection.

(c) The commission will assist by maintaining information pertinent to fire department staffing. The information shall be maintained in the Ernest A. Emerson Fire Protection Resource Library at the commission. Copies shall be made available, free of charge, to anyone requesting such information to the extent permitted by copyright laws.

§435.9. Personal Alert Safety System (PASS).

The employing entity shall:

(1) purchase, provide, and maintain a PASS device for each on duty fire protection personnel who engage in operations where IDLH atmospheres may be encountered, or where the atmosphere is unknown, or where hazardous conditions from fire or other emergencies exist, or where the potential for such exposure exists;

(2) ensure that all PASS devices used by fire protection personnel comply with the minimum standards of the National Fire Protection Association identified in NFPA 1982, Standard on Personal Alert Safety Systems (PASS) for Fire Fighters:

(A) the National Fire Protection Association standard applicable to a PASS device is the standard in effect at the time the entity contracts for new, rebuilt, or used PASS devices;

(B) an entity may continue to use a PASS device that meets the requirements of an earlier edition of NFPA 1982, unless the commission determines that the continued use of the PASS device constitutes an undue risk to the wearer, in which case the commission shall order that the use be discontinued and shall set an appropriate date for compliance with the revised standard;

(3) ensure that the PASS device assigned to an individual user be inspected at the beginning of each duty period and before each use.

(4) maintain and provide upon request by the commission, a departmental standard operating procedure regarding the proper use, selection, care and maintenance of PASS devices.

§435.11. Incident Management System (IMS).

(a) The fire department shall develop, maintain and use an incident management system.

(b) The incident management system shall:

(1) include a written operating procedure for the management of emergency incidents;

(2) require that the IMS be used at all emergency incidents;

(3) require operations to be conducted in a manner that recognizes hazards and assists in the prevention of accidents and injuries;

(4) require that all fire protection personnel be trained in the use of the IMS; and

(5) require that the IMS be applied to all drills, exercises and all other situations that involve hazards similar to those encountered at an actual emergency.

(c) The IMS shall meet the requirements of the applicable sections of the NFPA 1561, Standard on Fire Department Incident Management System.

(d) The commission recommends departments follow the National Incident Management System (NIMS) when developing their incident management system.

§435.13. Personnel Accountability System.

(a) The fire department shall develop, maintain and use a personnel accountability system that provides for a rapid accounting of all personnel at an emergency incident.

(b) The accountability system shall:

(1) require all fire protection personnel be trained in the use of the accountability system;

(2) require that the fire protection personnel accountability system be used at all incidents;

(3) require that all fire protection personnel operating at an emergency incident to actively participate in the personnel accountability system; and

(4) require that the incident commander be responsible for the overall personnel accountability system for the incident.

(c) The fire department shall be responsible for developing the system components required to make the personnel accountability system effective.

(d) The personnel accountability system shall meet the minimum standards required by the National Fire Protection Association 1561, Standard on Fire Department Incident Management System. If the

standard is revised, the fire department shall have one (1) year from the effective date of the new standard to comply.

§435.15. Operating At Emergency Incidents.

(a) The fire department shall develop, maintain and use a standard operating procedure for fire protection personnel operating at emergency incidents.

(b) The standard operating procedure shall:

(1) specify an adequate number of personnel to safely conduct emergency scene operations;

(2) limit operations to those that can be safely performed by personnel at the scene;

(3) require all personnel to be trained in and use the standard operating procedures; and

(4) comply with §435.17 (Procedures for Interior Structural Fire Fighting).

(c) The fire department may use standards established by the National Fire Protection Association for fire protection personnel operating at an emergency incident.

§435.17. Procedures for Interior Structural Fire Fighting (2-In /2-Out Rule).

(a) The fire department shall develop written procedures that comply with the Occupational Safety and Health Administration's Final Rule, 29 CFR Section 1910.134(g)(4) by requiring:

(1) a team of at least four fire protection personnel must be assembled before an interior fire attack can be made when the fire has progressed beyond the incipient stage;

(2) at least two fire protection personnel to enter the IDLH atmosphere and remain in visual or voice (not radio) contact with each other;

(A) Visual means that the fire protection personnel must be close enough to see each other.

(B) Voice means that the fire protection personnel of the entry team must be close enough to speak to one another without the use of radios.

(3) at least two fire protection personnel remain located outside the IDLH atmosphere to perform rescue of the fire protection personnel inside the IDLH atmosphere;

(4) all fire protection personnel engaged in interior structural fire fighting use self-contained breathing apparatus and be clothed in a complete set of protective clothing as identified in Chapter 435;

(5) all fire protection personnel located outside the IDLH atmosphere be equipped with appropriate retrieval equipment where retrieval equipment would contribute to the rescue of the fire protection personnel that have entered the IDLH atmosphere;

(6) one of the outside fire protection personnel must actively monitor the status of the inside fire protection personnel and not be assigned other duties. The second outside fire protection personnel may be assigned to an additional role, including, but not limited to, incident commander, safety officer, driver-operator, command technician or aide, or fire fighter/EMS personnel, so long as this individual is able to perform assistance or rescue activities without jeopardizing the safety or health of any fire protection personnel working at the scene;

(7) the fire protection personnel outside the IDLH atmosphere must remain in communication (including, but not limited to, radio) with the fire protection personnel in the IDLH atmosphere. Use of a signal line (rope) as a communications instrument for interior fire fighting is not permitted by the

commission. This does not preclude the use of rescue guide ropes (guide line or lifeline or by what ever name they may be called) used during structural searches; and

(8) each outside fire protection personnel must have a complete set of protective clothing and self-contained breathing apparatus, as identified in Chapter 435, immediately accessible for use if the need for rescue activities inside the IDLH atmosphere is necessary.

(b) The fire department shall comply with the 2-in/2-out rule as described in this section except in an imminent life-threatening situation when immediate action could prevent the loss of life or serious injury before the team of four fire protection personnel are assembled.

§435.19. Enforcement of Commission Rules.

(a) The commission shall enforce all commission rules at any time, including, but not limited to, commission investigations, fire department inspections, or upon receiving a written complaint from an identified person or entity of an alleged infraction of a commission rule.

(b) The commission shall not provide prior notification of an inspection to a fire department.

(c) Upon receipt of a signed complaint alleging a violation of a commission rule, the commission shall have 30 days to initiate an investigation and report back to the complainant its progress.

(d) Upon substantiating the validity of a written complaint, the commission shall follow the procedures outlined in Texas Government Code, Chapter 419, §419.011(b) and (c).

§435.21. Fire Service Joint Labor Management Wellness-Fitness Initiative.

(a) A fire department shall assess the wellness and fitness needs of the personnel in the department. The procedure used to make this assessment shall be written and made available for Commission inspection.

(b) A fire department shall develop and maintain a standard operating procedure to address those needs.

(c) The approach to the fitness needs of the department shall be based on the local assessment and local resources.

(d) The standard operating procedure shall be made available to the Commission for inspection.

§435.23. Fire Fighter Injuries.

(a) A fire department shall report all Texas Workers' Compensation Commission reportable injuries that occur to on-duty regulated fire protection personnel on the Commission form.

(b) Minor injuries are those injuries that do not result in the fire fighter missing more than one duty period or does not involve the failure of personal protective equipment. Minor injuries shall be reported within 30 business days of the injury event.

(c) Major injuries are those that require the fire fighter to miss more than one duty period. Major injuries shall be reported within five business days of the injury event.

(d) Investigatable injuries are those resulting from the malfunction of personal protective equipment, failure of personal protective equipment to protect the fire fighter from injury, or injuries sustained from failure to comply with any provision of Commission mandated department SOPs. Investigatable injuries shall be reported within five business days of the injury event.

(e) The regulated entity shall secure any personal protective equipment involved in a fire fighter injury and shall be made available to the Commission for inspection.

§435.25. Courage to be Safe So Everyone Goes Home Program.

(a) In an effort to improve firefighter safety in the State of Texas, all regulated entities will ensure that the National Fallen Firefighters Foundation's "Courage to be Safe So Everyone Goes Home" program be completed as part of the continuing education required for certified fire protection personnel by. Individuals will be credited with four hours of continuing education credit for completing this program.

(b) All fire protection personnel will be required to complete the National Fallen Firefighters Foundation's "Courage to be Safe So Everyone Goes Home" program training within one year following appointment to a fire department if the individual has not previously completed the program.

(c) Departments will report the completion of training through the commission's web based reporting system.

(d) Failure to complete the National Fallen Firefighters Foundation's "Courage to be Safe So Everyone Goes Home" program before the required deadlines will be considered a violation of continuing education rules found in Chapter 441 of this title (relating to Continuing Education).

§435.27. Live Fire Training Structure Evolutions.

The most current edition of NFPA 1403, Standard on Live Fire Training Evolutions, shall be used as a guide when developing standard operating procedures for conducting live fire training. The following requirements shall apply for all Live Fire Training Structure Evolutions conducted.

(1) The officer in charge or instructor will ensure that the water supply rate and duration for each individual Live Fire Training Structure Evolution is adequate to control and extinguish the training fire, the supplies necessary for backup lines to protect personnel, and any water needed to protect exposed property.

(2) The instructor-in-charge shall assign the following personnel:

(A) One instructor to each functional crew, which shall not exceed five students.

(B) One instructor to each backup line.

(C) Additional personnel to backup lines to provide mobility.

(D) One additional instructor for each additional functional assignment.

(3) The officer in charge or instructor will ensure that the buildings or props being utilized for live fire training are in a condition that would not pose an undue safety risk.

(4) A safety officer shall be appointed for all Live Fire Training Structure Evolutions. The safety officer shall have the authority, regardless of rank, to alter, suspend or control any aspect of the operations when, in his or her judgment, a potential or actual danger, accident, or unsafe condition exists. The safety officer shall not be assigned other duties that interfere with safety responsibilities.

(5) No person(s) shall play the role of a victim inside the building.

(6) Prior to the ignition of any fire, instructors shall ensure that all personal protective clothing and/or self contained breathing apparatus are NFPA compliant and being worn in the proper manner.

(7) Prior to conducting any live fire training, a pre-burn briefing session shall be conducted. All participants shall be required to conduct a walk-through of the structure in order to have a knowledge of, and familiarity with, the layout of the building and to be able to facilitate any necessary evacuation of the building.

(8) A standard operating procedure shall be developed and utilized for Live Fire Training Structure Evolutions. The standard operating procedure shall include, but not be limited to:

(A) a Personal Alert Safety System (PASS). A PASS device shall be provided for all participating in live fire training and shall meet the requirements in §435.9 of this title (relating to Personal Alert Safety System (PASS));

(B) a Personnel Accountability System that complies with §435.13 of this title (relating to Personnel Accountability System) shall be utilized;

(C) an Incident Management System;

(D) use of personal protective clothing and self-contained breathing apparatus;

(E) an evacuation signal and procedure; and

(F) pre-burn, burn and post-burn procedures.

§435.29. Federal Highway Administration Traffic Incident Management Program.

(a) In an effort to improve firefighter safety in the State of Texas, all regulated entities will ensure that the Federal Highway Administration Traffic Incident Management program or an equivalent course that is approved by the commission be completed as part of the continuing education required for certified fire protection personnel by December 1, 2020. Individuals will be credited with four hours of continuing education credit for completing this program.

(b) All regulated fire protection personnel must complete the Federal Highway Administration Traffic Incident Management program or an equivalent course that is approved by the commission prior to December 1, 2020.

(c) All fire protection personnel appointed after December 1, 2020 will be required to complete the Federal Highway Administration Traffic Incident Management program training or an equivalent course that is approved by the commission within one year of appointment to a fire department.

(d) Departments will report the completion of training through the commission's web based reporting system.

(e) Failure to complete the Federal Highway Administration Traffic Incident Management program or an equivalent course that is approved by the commission before the required deadline will be considered a violation of continuing education rules found in Chapter 441 of this title (relating to Continuing Education).

12. 37 Tex. Administrative Code, Part 13, Chapter 421, Standards For Certification regarding testing and certification requirements.

13. 37 Tex. Administrative Code, Part 13, Chapter 441, Continuing Education regarding the review of latest TCFP injury report.

Texas Commission on Fire Protection
Agenda Item Summary

MEETING: Commission
DATE: 07/15/2021

Agenda Item #: **13**

Agenda Title: **Chapter 441, Continuing Education**

Action to be taken: Discussion and possible publication

Origin of Item: ***Health & Wellness Committee/Staff***

1. INTRODUCTION/PURPOSE

The purpose of the item is for discussion regarding continuing education requirements.

2. DESCRIPTION/ JUSTIFICATION

The agenda item allows for discussion regarding the requirement to review the most recent copy of the injury report as part of the continuing education requirements.

3. BUDGET IMPACT

No budget impact is anticipated

4. TIMELINE CONSIDERATIONS

This proposal is for publication, to be considered for final adoption at the commission's October 2021 meeting.

5. RECOMMENDATION

Propose for publication

6. REFERENCES

Title 37, Chapter 441, Continuing Education

CHAPTER 441

CONTINUING EDUCATION

§441.1. Objective.

Continuing education is intended to maintain or increase the knowledge and skills pertinent to the fire service.

§441.3. Definitions.

The following words and terms, when used in this chapter, shall have the following meanings, unless the context clearly indicates otherwise.

(1) Certification period--That period from the time a certificate is obtained or renewed until it is time for the certificate to be renewed again. See §437.5 of this title (relating to Renewal Fees) for the definition of certification period.

(2) Level 1--Training intended to maintain previously learned skills as stated in the commission certification curriculum manual for the certifications held.

(3) Level 2--Fire service training or education intended to develop new skills that are not contained in the commission's certification curriculum manual for certifications held.

§441.5. Requirements.

(a) Continuing education shall be required in order to renew certification.

(b) The continuing education requirement for renewal shall consist of a minimum of 18 hours of training to be conducted during the certification period. **Of the 18 hours, two hours shall be a review of the most recent TCFP injury report, with a focus on the top three leading causes of injuries during the reporting period.** All documentation of training used to satisfy the continuing education requirements must be maintained for a period of three years from the date of the training. Continuing education records shall be maintained by the department in accordance with the Texas State Library and Archives Commission, State and Local Records Management Division, Records Schedule, Local Schedule (GR 1050-28), whichever is greater.

(c) Level 1 training must be conducted by a certified instructor. Interactive computer-based continuing education training that is supervised and verified by a certified instructor is acceptable.

(d) The continuing education program of a regulated entity must be administered and maintained in accordance with commission rule by a certified instructor.

(e) No more than four hours per year in any one subject of Level 1 training may be counted toward the continuing education requirement for a particular certification.

(f) There shall be no "hour per subject limit" placed on Level 2 courses, except that emergency medical courses shall be limited to four hours per year.

(g) The head of a fire department may select subject matter for continuing education appropriate for a particular discipline.

(h) The head of a fire department must certify whether or not the individuals whose certificates are being renewed have complied with the continuing education requirements of this chapter on the certification renewal document. Unless exempted from the continuing education requirements, an

individual who fails to comply with the continuing education requirements in this chapter shall be notified by the commission of the failure to comply.

(i) After notification from the commission of a failure to comply with continuing education requirements, an individual who holds a certificate is prohibited from performing any duties authorized by a required certificate until such time as the deficiency has been resolved and written documentation is furnished by the department head for approval by the commission. Continuing education hours obtained to resolve a deficiency may not be applied to the continuing education requirements for the current certification period.

(j) Any person who is a member of a paid or volunteer fire department who is on extended leave for a cumulative period of six months or longer due to a documented illness, injury, or activation to military service may be exempted from the continuing education requirement for the applicable renewal period(s). Such exemptions shall be reported by the head of the department to the commission at renewal time, and a copy kept with the department continuing education records for three years.

(k) Any individual who is not a member of a paid or volunteer fire department who is unable to perform work, substantially similar in nature as would be performed by fire protection personnel appointed to that discipline, may be exempted from the continuing education requirement for the applicable renewal period(s). Commission staff shall determine the exemption using documentation provided by the individual and the individual's treating physician of the illness or injury that cumulatively lasts six months or longer, or by documentation of military service or activation to military service.

(l) In order to renew certification for any discipline which has a continuing education requirement stated in this chapter, an individual holder of a certificate not employed by a regulated entity must comply with the continuing education requirements for that discipline. Only 20 total hours of continuing education for each certification period in Level 1 or Level 2 subjects relating to the certification being renewed shall be required to renew all certificates the individual holds, except as provided in §441.17 of this title (relating to Continuing Education for Hazardous Materials Technician).

(m) An individual certificate holder, not employed by a regulated entity, shall submit documentation of continuing education training upon notification by the commission. An example of documentation of continuing education training may include, but not be limited to a Certificate of Completion, a college or training facility transcript, a fire department training roster, etc. Commission staff will review and may approve or disapprove such documentation of training in accordance with applicable commission rules and/or procedures. The training for a resident of Texas at the time the continuing education training is conducted shall be administered by a commission instructor, commission certified training facility, an accredited institution of higher education, or a military or nationally recognized provider of training. The training for a nonresident of Texas, shall be delivered by a state fire academy, a fire department training facility, an accredited institution of higher education, or a military or nationally recognized provider of training. The individual must submit training documentation to the commission for evaluation of the equivalency of the training required by this chapter. The individual certificate holder is responsible for maintaining all of his/her training records for a period of three years from the date of the training.

(n) If an individual has completed a commission approved academy in the 12 months prior to his or her certification expiration date, a copy of that certificate of completion will be acceptable documentation of continuing education for that certification renewal period.

§441.7. Continuing Education for Structure Fire Protection Personnel.

(a) A minimum of two hours of continuing education in structure fire protection subjects in addition to the continuing education requirements in §441.5(b) of this title (relating to Requirements) will be

required for personnel certified as structure fire protection personnel and who are appointed to structure fire protection duties.

(b) Subjects selected to satisfy the continuing education requirement may be selected from Level 1, Level 2, or a combination of both.

§441.9. Continuing Education for Aircraft Rescue Fire Fighting Personnel.

(a) Continuing education will be required for personnel assigned as aircraft rescue fire fighting personnel.

(b) Continuing education must, at a minimum, meet the specific training requirements of FAR 139.319(i)(2) and (3) (pertaining to Aircraft Rescue and Fire Fighting Operational Requirements). Continuing education required by this subsection may exceed 20 hours, if necessary, to complete all required subjects.

§441.11. Continuing Education for Marine Fire Protection Personnel.

(a) A minimum of two hours of continuing education in marine fire protection subjects in addition to the continuing education requirements in §441.5(b) of this title (relating to Requirements) will be required for personnel certified as marine fire protection personnel and who are appointed to marine fire protection duties for any certification period beginning after October 31, 1993.

(b) Subjects selected to satisfy the continuing education requirement may be selected from Level 1, Level 2, or a combination of both.

§441.13. Continuing Education for Fire Inspection Personnel.

(a) A minimum of two hours of continuing education in fire inspection subjects in addition to the continuing education requirements in §441.5(b) of this title (relating to Requirements) will be required for personnel certified as fire inspection personnel and who are appointed to fire inspection duties.

(b) Subjects selected to satisfy the continuing education requirement may be selected from Level 1, Level 2, or a combination of both.

§441.15. Continuing Education for Arson Investigator or Fire Investigator.

(a) A minimum of two hours of continuing education in arson or fire investigation subjects in addition to the continuing education requirements in §441.5(b) of this title (relating to Requirements) will be required for personnel certified as arson investigation or fire investigation personnel and who are appointed to arson or fire investigation duties.

(b) Subjects selected to satisfy the continuing education requirement may be selected from Level 1, Level 2, or a combination of both.

§441.17. Continuing Education for Hazardous Materials Technician.

(a) Eight hours of continuing education in hazardous materials (technician level) will be required for individuals certified as a hazardous materials technician. This will be in addition to continuing education required by other sections of this chapter.

(b) Subjects selected to satisfy the continuing education requirement may be selected from Level 1, Level 2, or a combination of both.

§441.19. Continuing Education for Head of a Fire Department.

(a) A minimum of twenty hours of continuing education in addition to the continuing education requirements in §441.5(b) of this title (relating to Requirements) will be required for personnel

certified as head of a fire department and who are appointed as head of a department. The twenty hours of continuing education shall include:

(1) ten hours in emergency operations subjects; and

(2) ten hours in fire administration subjects. These subjects may include emergency management, leadership, budget and finance, labor relations, human resources and personnel management, collective bargaining, conflict resolution, organizational and strategic planning, community relations and public education, intergovernmental regulations, and personnel health, safety and wellness.

(b) Subjects selected to satisfy the continuing education requirement may be selected from Level 1, Level 2, or a combination of both.

§441.21. Continuing Education for Fire Service Instructor.

(a) A minimum of two hours of continuing education in fire service instruction subjects in addition to the continuing education requirements in §441.5(b) of this title (relating to Requirements) will be required for individuals certified as a fire service instructor and who are appointed to fire service instructor duties.

(b) Subjects selected to satisfy the continuing education requirement may be selected from Level 1, Level 2, or a combination of both.

§441.23. Continuing Education for Wildland Fire Fighter.

A minimum of four hours of continuing education in Wildland Fire Fighting subjects will be required for individuals certified as a Wildland Fire Fighter. The required hours must include hands-on refresher training in the use and deployment of a fire shelter. The four hours may be included in the eighteen hours required during the certification renewal period.

14. Request from the Texas A&M Forest Service for a possible rule amendment to 37 Tex. Administrative Code, Part 13, Chapter 455, Minimum Standards for Wildland Fire Protection Certification regarding online wildland training.

From: Duncan, Guy
Sent: Friday, June 4, 2021 2:41 PM
To: Mike Wisko
Cc: Rogers, Les; Karns, Jared
Subject: Online Wildland Training

Chief Wisko,

I would like to ask for an audience with TCFP to discuss the online wildland training and its acceptance?

As you are aware, historically online wildland training has not been accepted in Texas. With the shrinking of fire department budgets and the high cost of overtime the TAMFS was put to task to implement processes to make the online training acceptable without degrading the integrity and quality of the training.

At the TIFMAS stakeholders meeting in April of 2020 the TFS Approved Online Hybrid was introduced for acceptance. After questions and discussion, the Stakeholders agreed to its acceptance.

The TFS Approved Online Hybrid consist of the following:

- A hosting department
- An approved lead instructor
- Online training of S130, S190 and L180
- An In-person Test
- An approved Field Day

I appreciate your time and consideration.

Thank You,

Guy Duncan
Assistant Chief
TIFMAS-Fire Department Programs
Texas A&M Forest Service

CHAPTER 455
MINIMUM STANDARDS FOR WILDLAND FIRE PROTECTION CERTIFICATION

§455.1. Minimum Standards for Wildland Fire Protection Personnel.

(a) A wildland fire fighter is defined as an individual whose assigned function is suppression of fires in the wildland or wildland-urban interface setting.

(b) Individuals holding Wildland Fire Protection certification shall be required to comply with the continuing education requirements in Chapter 441 of this title (relating to Continuing Education).

(c) All Wildland Fire Protection certifications issued by the commission and referenced in this chapter are voluntary.

§455.3. Minimum Standards for Basic Wildland Fire Protection Certification.

In order to be certified as Basic Wildland Fire Protection personnel, an individual must:

(1) possess valid documentation of accreditation from the International Fire Service Accreditation Congress as Wildland Fire Fighter Level I; or

(2) complete a commission approved Basic Wildland Fire Protection program and successfully pass the commission examination as specified in Chapter 439 of this title (relating to Examinations for Certification). An approved Basic Wildland Fire Protection training program shall consist of one of the following:

(A) completion of the commission approved Basic Wildland Fire Fighter training program, as specified in the applicable chapter of the commission's Certification Curriculum Manual; or

(B) completion of the following National Wildfire Coordinating Group (NWCG) courses:

(i) S-130: Firefighter Training;

(ii) S-190: Introduction to Wildland Fire Behavior;

(iii) L-180: Human Factors on the Fireline; and

(iv) I-100: Introduction to the Incident Command System, or an equivalent basic incident command system course such as NIMS IS-100

§455.5. Minimum Standards for Intermediate Wildland Fire Protection Certification.

In order to be certified as Intermediate Wildland Fire Protection personnel, an individual must:

(1) hold Basic Wildland Fire Protection certification issued by the commission; and

(2) complete the associated position task book as adopted by the National Wildfire Coordinating Group (NWCG) 310-1. Proof of completion of the position task book must be from the Texas Intrastate Fire Mutual Aid System (TIFMAS) (e.g. task book approval form or TIFMAS card); and

(3) individual who hold Structure Fire Protection certification issued by the commission must complete a commission approved Intermediate Wildland Fire Protection program and successfully pass the commission examination as specified in Chapter 439 of this title (relating to Examinations for Certification). An approved Intermediate Wildland Fire Protection training program shall consist of one of the following:

(A) completion of the commission approved Intermediate Wildland Fire Fighter Curriculum, as specified in the applicable chapter of the commission's Certification Curriculum Manual; or

(B) completion of the NWCG course G-131: Wildland Training (FFT1) for Structural Fire Fighters; or

(C) completion of the NWCG courses S-131 and S-133 prior to October 2016, or only S-131 after October 2016; or

(4) individuals who hold a State Firemen's and Fire Marshals' Association Advanced Accredited certification issued prior to January 1, 2012, or a State Firemen's and Fire Marshals' Association Firefighter II certification issued on or after January 1, 2012, must complete a commission approved Intermediate Wildland Fire Protection program and successfully pass the commission examination which includes both Basic Structure Fire Protection and Intermediate Wildland Fire Protection, as specified in Chapter 439 of this title. An approved Intermediate Wildland Fire Protection training program shall consist of one of the following:

(A) completion of the commission approved Intermediate Wildland Fire Fighter Curriculum, as specified in the applicable chapter of the commission's Certification Curriculum Manual; or

(B) completion of the NWCG course G-131: Wildland Training (FFT1) for Structural Fire Fighters; or

(C) completion of the NWCG courses S-131 and S-133 prior to October 2016, or only S-131 after October 2016.

§455.7. Examination Requirements.

(a) Examination requirements of Chapter 439 of this title (relating to Examinations for Certification) must be met in order to receive Wildland Fire Protection Certification.

(b) Persons seeking a commission certification referenced in this chapter who do not currently hold a certification issued by the commission must meet all requirements regarding application for initial certification.

15. Review of 2020 data collected regarding fire fighter injuries and the development of recommendations to be submitted to the State Fire Marshal's Office for inclusion in its annual report.

TEXAS COMMISSION ON FIRE PROTECTION INJURY REPORT

January 1, 2020 to December 31, 2020

TEXAS COMMISSION ON FIRE PROTECTION

Table of Contents

Mission

The commission shall gather and evaluate data on fire protection personnel injuries and develop recommendations for reducing injuries.

Why we are collecting injury data

Under Texas Government Code §419.048, the Texas Legislature charged the commission with gathering and evaluating data on injuries. The rules requiring regulated entities to report injuries to the commission are in Texas Administrative Code §435.23. The commission encourages volunteer entities to report injuries so that it can gain as accurate a picture as possible concerning injury trends in the Texas fire service. The injury reporting program began in March 2010.

Information the commission collects

- Minor, serious, and fatal injuries, as well as toxic exposures
- Activities where fire personnel are injured
- Types of injuries (burns, strain-sprains, wounds, etc.)
- Body parts being injured
- Tasks performed at the time of injury
- Missed time
- Work assignment after injury
- Malfunctions/failures of personal protective equipment (PPE), self-contained breathing apparatus (SCBA), personal alert safety systems (PASS devices) and standard operating procedures (SOPs)

How this will help the fire service

- Identify common injuries and exposures
- Identify trends in injuries and exposures
- Identify needed training
- Evaluate and find improvements in procedures
- Track lost time injuries (requested by user community)

Executive Summary

The information in this report is collected by the Texas Commission on Fire Protection (TCFP) via an on-line injury reporting application. The report is a comprehensive analysis of injuries and exposures to Texas fire fighters. These injuries and exposures were reported to the TCFP in 2020 by fire departments throughout the state, and this report contains charts and graphs depicting the results of the information that was collected. The report also compares Texas fire fighter injury statistics with national statistics that were gathered by the National Fire Protection Association (NFPA) in 2019.

Under Texas Government Code §419.048, the Texas Commission on Fire Protection is charged with developing and establishing criteria to receive and analyze injury information pertaining to Texas fire fighters. The commission reviews this information to develop recommendations to help reduce injuries to fire protection personnel. The commission provides this information to the State Fire Marshal's Office (SFMO) by September 1 of each year for inclusion in the SFMO's annual *Firefighter Fatality Investigations Report*. The commission has enacted rules about reporting injuries in the Texas Administrative Code (TAC) Title 37, Chapter 435, and has established the criteria and policies for reporting and analyzing the information.

The commission originally built the data systems necessary to gather this information in 2010. In 2017 the data systems were migrated from a Microsoft Access database structure to a new system which was developed in-house and designed specifically to meet the information resource needs of the TCFP. Fine-tuning of this new system is ongoing as we receive feedback from stakeholders. The reporting process is accomplished online. Fire departments regulated by the commission have been notified of the requirement to report. Several volunteer departments, which are not regulated by the commission, are also participating voluntarily.

A Reminder for Fire Departments

Any injuries to fire protection personnel that are reported to the Texas Worker's Compensation Commission must be reported to the Texas Commission on Fire Protection. This includes cancer diagnoses.

This report concludes with recommendations from the commission to help reduce the number of fire fighter injuries in Texas and to improve the injury reporting program.

Abstract

This report contains data submitted by regulated and non-regulated entities. The data collected in 2020 was the tenth full year of reporting.

Grand Totals – 2020

Total number of incidents (injury reports) submitted: 5,530
Total number of individuals who sustained an injury or exposure: 6,406*
Total number of injuries reported: 2,552
Total number of exposures reported: 4,077

**Note that an individual could have more than one injury or could have an injury and an exposure. This explains why the total number of individuals who sustained an injury is less than the total number of injuries + total number of exposures. (6,406 < 2,552 + 4,077)*

Because the injury reporting system was reconfigured in 2018, the information collected by the TCFP has evolved over the last couple of years. **It's important to remember that one incident report can have multiple individuals involved, and each of those individuals can have one or more injuries.** For example:

Joe and Bob were burned in a fire while on duty. This resulted in:

- One incident (one injury report), with
- Two individuals who…
- Sustained three injuries
  - Joe was burned on the hand and arm (two injuries)
  - Bob was burned on the leg (one injury)

557 of the 756 regulated departments used TCFP's injury reporting system in 2020. That's a reporting rate of 74%. These departments reported a total of 6,406 individuals who were either injured or exposed in calendar year 2020. Of these, 525 individuals incurred their injuries/exposures during fire suppression activities, representing 8 percent of the total reported injuries (see Table 1).

Injuries and exposures from emergency medical services (EMS) activities surpassed those from fire suppression activities in 2020. EMS activities accounted for 3,192 of the 6,406 total individuals who were injured or exposed, or 50 percent.

After EMS and fire suppression, the next highest number reported in 2020 occurred in the performance of station duties, with 1,454, or 23 percent, of the total reported injuries.

Skills training and wellness/fitness activities again rounded out the top five activities: 429 skills training injuries (7 percent of the total) and 422 wellness/fitness injuries (7 percent of the total).

We feel it's important to note that the total number of injured or exposed individuals reported in station duties, wellness/fitness activities, and skills training (which are all non-emergency activities) accounted for 36 percent of the total injuries reported in 2020.

State of Texas vs. NFPA

Comparison between the State of Texas (2019) and National Fire Protection Association (NFPA) U.S. Firefighter Injuries (2019)

For the purposes of comparison, the commission has mapped its categories to the NFPA categories as follows:

- *"Fireground"* includes the commission's Fire Suppression and Rescue – Fire Related categories.
- *"Non-Fire"* includes Rescue Non-Fire, EMS and Hazmat.
- *"Other On-Duty"* includes Fire Prevention, Station Duties and Wellness/Fitness.

The NFPA's "Responding and Returning" and "Training" categories appear to correspond closely to the commission's categories. (The NFPA numbers include Texas statistics, although the reporting populations may not be the same.)

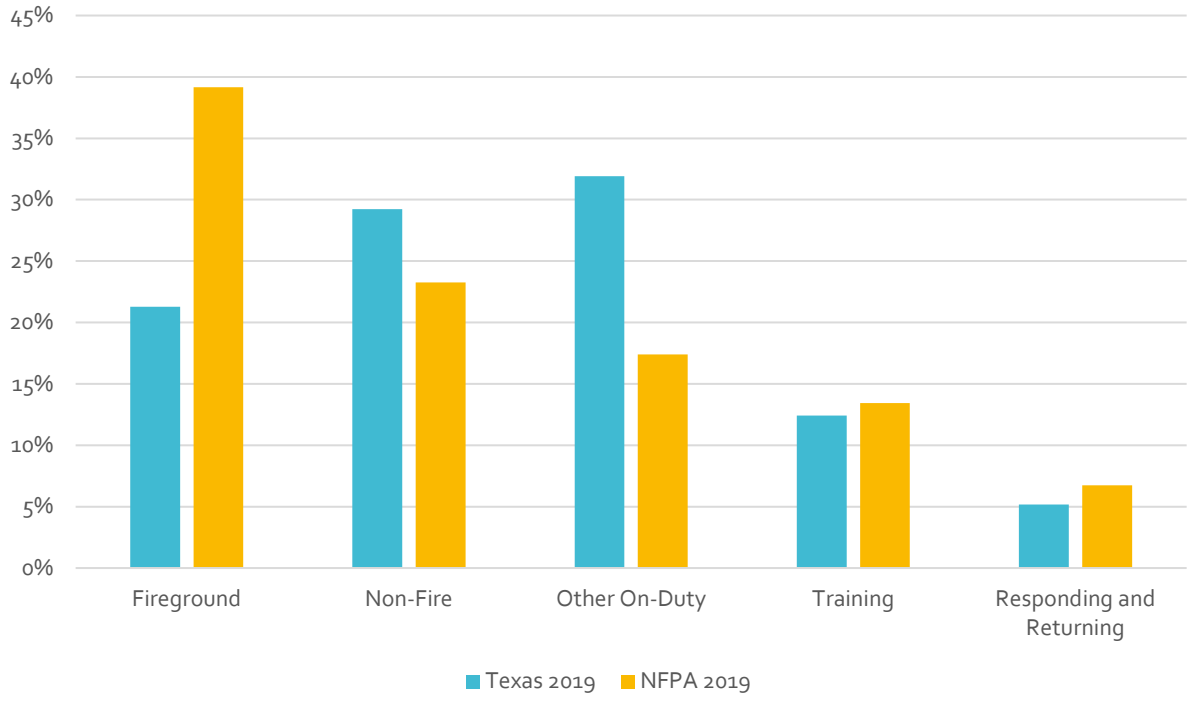
Comparing Texas 2019 and NFPA 2019

Table 1: Comparison of Texas 2019 and NFPA 2019

	Texas 2019		NFPA 2019	
Category	**Count**	**Percent**	**Count**	**Percent**
Fireground	804	21%	23,825	39%
Non-Fire	1,105	29%	14,150	23%
Other On-Duty	1,206	32%	10,575	17%
Training	469	12%	8,175	13%
Responding and Returning	196	5%	4,100	7%
Total	**3,780**	**100%**	**60,825**	**100%**

NFPA data is from the Firefighter Injuries in the United States in 2019 report, copyright ©2019 National Fire Protection Association, Quincy, MA.

Figure 1: Injuries by Activity, percentages
(Comparing Texas 2019 and NFPA 2019)

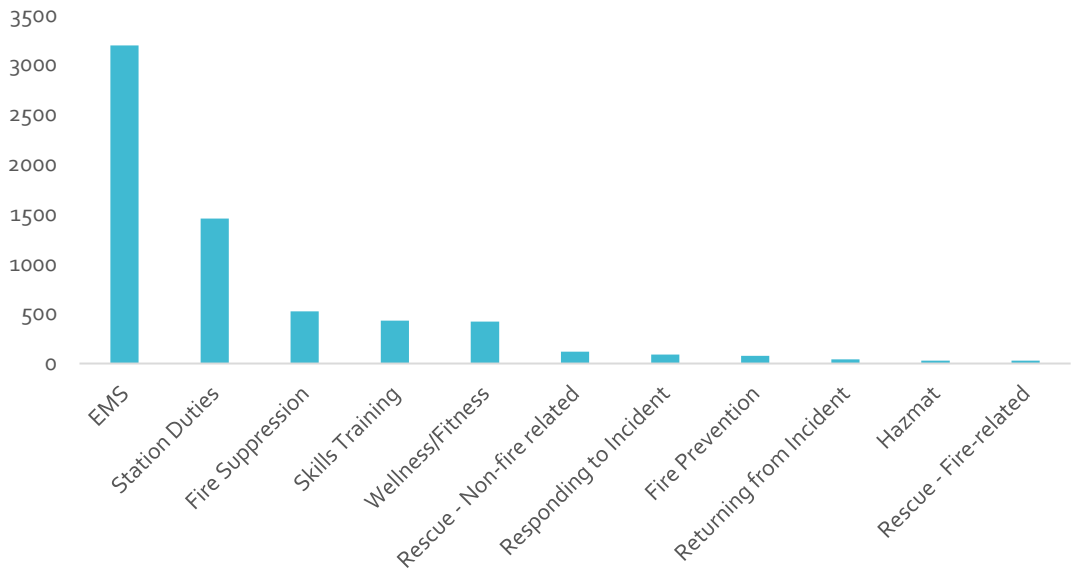


Fire Protection Personnel Injuries

Table 2: Total Injured or Exposed Individuals by Activity and Severity, 2020

Activity	Minor	Serious	Fatal	Total	2019	2018
EMS	2,529	660	3	3,192	922	1,027
Station Duties	722	731	1	1,454	739	639
Fire Suppression	397	127	1	525	763	799
Skills Training	304	125	0	429	469	400
Wellness/Fitness	306	116	0	422	407	417
Rescue - Non-fire related	89	29	0	118	157	183
Responding to Incident	68	23	0	91	143	163
Fire Prevention	49	27	0	76	60	90
Returning from Incident	28	13	0	41	53	91
Hazmat	22	7	0	29	26	28
Rescue - Fire-related	26	3	0	29	41	44
Total	**4,540**	**1,861**	**5**	**6,406**	3,780	3,881

Figure 2: Total Injured or Exposed Individuals by Activity, 2020



Injuries/Exposures by Activity

EMS activities resulted in the highest number of minor injuries in 2020 (see Table 3), which is consistent with the previous five years. The total numbers of minor and serious injuries and exposures is up significantly in 2020 compared with previous years due to the COVID-19 pandemic.

Definitions
Minor = An injury/exposure that does not result in the employee missing a full duty period.
Serious = An injury/exposure that results in the employee missing one or more full duty periods.
Fatal = The injured/exposed individual did not survive.

Table 3: Minor Injury/Exposure Activities, 2016 – 2020

	2016		2017		2018		2019		2020	
Activity	**Count**	**Percent**	**Count**	**Percent**	**Count**	**Percent**	**Count**	**Percent**	**Count**	**Percent**
EMS	882	27.89%	929	28.99%	843	29.09%	776	25.84%	2,529	55.70%
Station Duties	434	13.73%	481	15.01%	437	15.08%	591	19.68%	722	15.90%
Fire Suppression	866	27.39%	662	20.66%	607	20.95%	616	20.51%	397	8.74%
Wellness/Fitness	252	7.97%	254	7.93%	286	9.87%	290	9.66%	306	6.74%
Skills Training	311	9.84%	291	9.08%	277	9.56%	330	10.99%	304	6.70%
Rescue - Non-Fire	161	5.09%	206	6.43%	157	5.42%	140	4.66%	89	1.96%
Responding to Incident	117	3.70%	156	4.87%	99	3.42%	114	3.80%	68	1.50%
Fire Prevention	47	1.49%	50	1.56%	69	2.38%	46	1.53%	49	1.08%
Returning from Incident	37	1.17%	42	1.31%	57	1.97%	39	1.30%	28	0.62%
Rescue - Fire Related	20	0.63%	113	3.53%	39	1.35%	37	1.23%	26	0.57%
Hazmat	35	1.11%	21	0.66%	27	0.93%	24	0.80%	22	0.48%
Total	**3,162**	**100.00%**	**3,205**	**100.00%**	**2,898**	**100.00%**	**3,003**	**100.00%**	**4,540**	**100.00%**

(Numbers in red above = least amount of injuries for the five-year period.)

Table 4: Serious Injury/Exposure Activities, 2016 – 2020

Activity	2016		2017		2018		2019		2020	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
Station Duties	172	18.76%	185	21.29%	201	20.49%	147	19.02%	731	39.28%
EMS	158	17.23%	147	16.92%	184	18.76%	146	18.89%	660	35.46%
Fire Suppression	179	19.52%	157	18.07%	191	19.47%	145	18.76%	127	6.82%
Skills Training	141	15.38%	120	13.81%	123	12.54%	139	17.98%	125	6.72%
Wellness/Fitness	146	15.92%	129	14.84%	131	13.35%	117	15.14%	116	6.23%
Rescue - Non-Fire	52	5.67%	27	3.11%	26	2.65%	17	2.20%	29	1.56%
Fire Prevention	11	1.20%	15	1.73%	21	2.14%	14	1.81%	27	1.45%
Responding to Incident	36	3.93%	53	6.10%	64	6.52%	28	3.62%	23	1.24%
Returning from Incident	18	1.96%	28	3.22%	34	3.47%	14	1.81%	13	0.70%
Hazmat	3	0.33%	7	0.81%	5	0.51%	4	0.52%	7	0.38%
Rescue - Fire Related	1	0.11%	1	0.12%	1	0.10%	2	0.26%	3	0.16%
Total	**917**	**100.00%**	**869**	**100.00%**	**981**	**100.00%**	**773**	**100.00%**	**1,861**	**100.00%**

(Numbers in red above = least amount of injuries for the five year period.)

Table 5: Number of Individuals Who Sustained Fatal Injuries/Exposures, 2020

Activity	Count	Percent
EMS	3	60%
Fire Suppression	1	20%
Station Duties	1	20%
Total	**5**	**100%**

Emergency vs. Non-Emergency Injuries

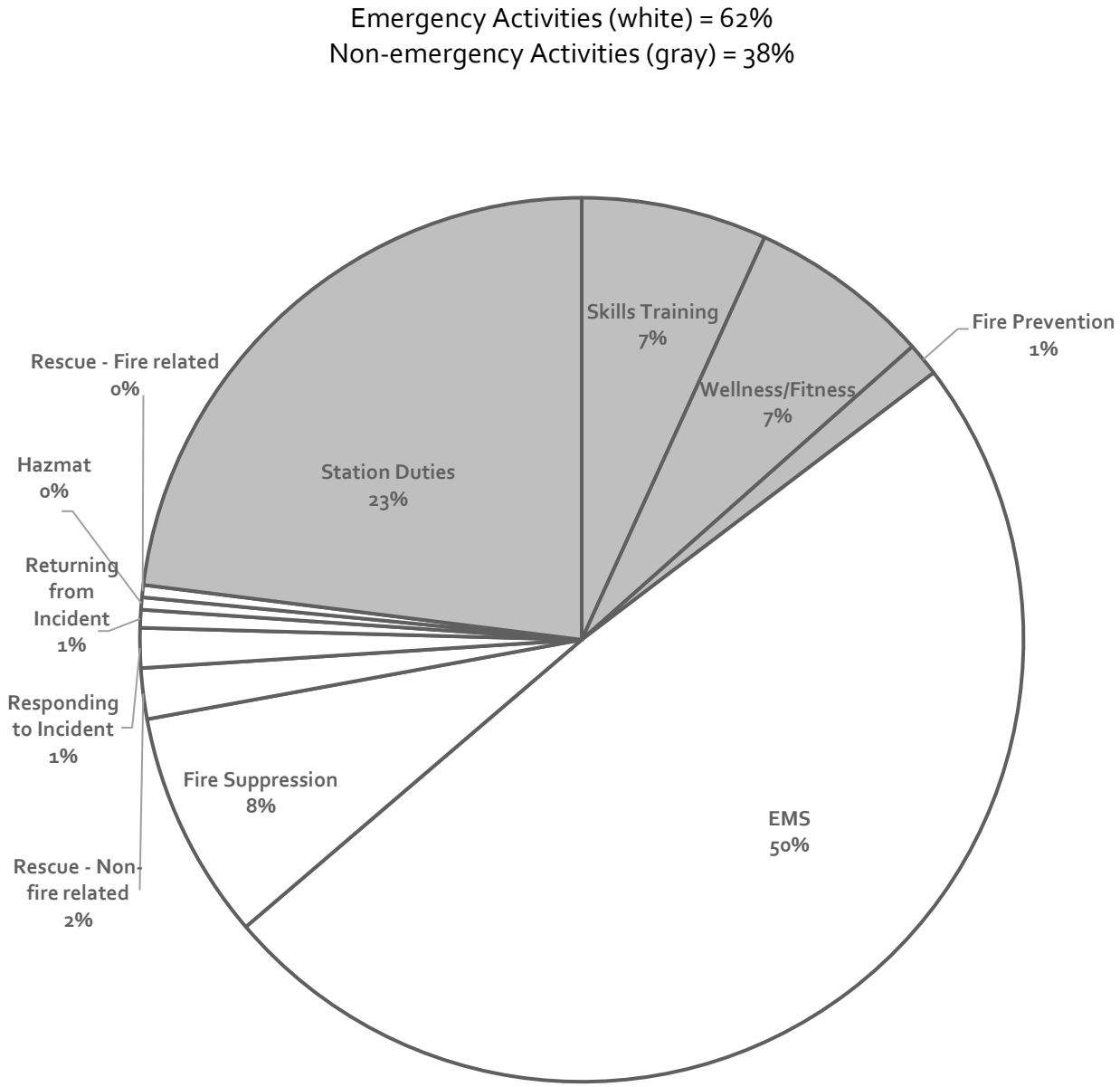
Table 6: Number of Injured Individuals by Emergency Activity and Severity, 2020

Activity	Minor	Serious	Fatal	Total
EMS	2,529	660	3	3,192
Fire Suppression	397	127	1	525
Rescue - Non-fire related	89	29	0	118
Responding to Incident	68	23	0	91
Returning from Incident	28	13	0	41
Hazmat	22	7	0	29
Rescue - Fire related	26	3	0	29
Total	**3,159**	**862**	**4**	**4,025**

Table 7: Number of Injured Individuals by Non-Emergency Activity and Severity, 2020

Activity	Minor	Serious	Fatal	Total
Station Duties	722	731	1	1,454
Skills Training	304	125	0	429
Wellness/Fitness	306	116	0	422
Fire Prevention	49	27	0	76
Total	**1,381**	**999**	**1**	**2,381**

Figure 3: Percentages of Injured Individuals in Emergency and Non-Emergency Activities, 2020

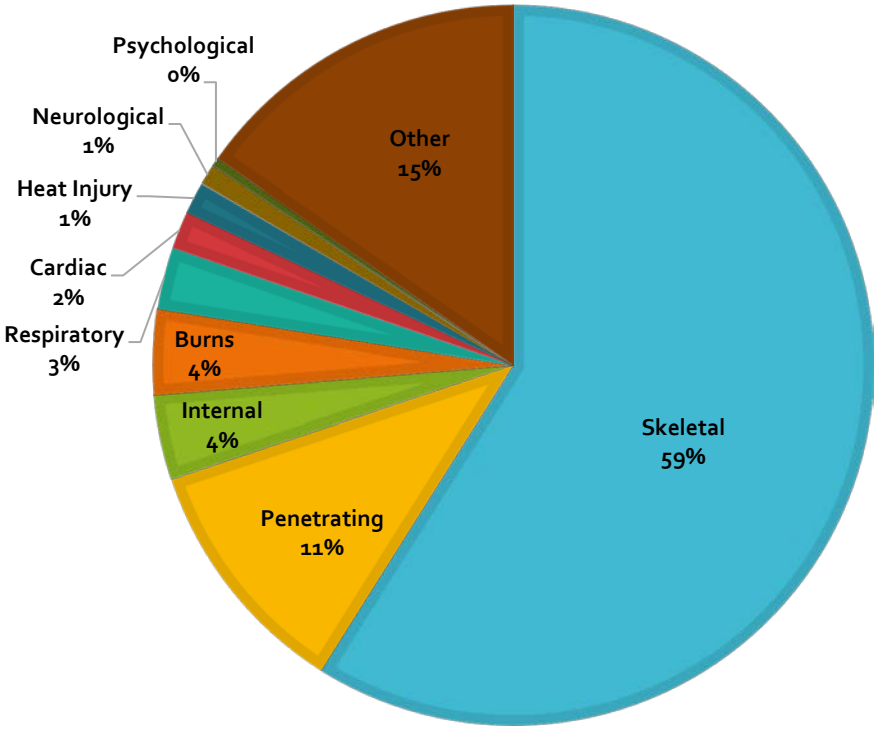


Types of Injuries

Table 8: Types of Injuries, 2020

Type of Injury	2020	
	Count	Percent
Skeletal	1,504	59%
Penetrating	282	11%
Internal	98	4%
Burns	96	4%
Respiratory	70	3%
Cardiac	44	2%
Heat Injury	36	1%
Neurological	24	1%
Psychological	10	0%
Other	388	15%
Total	**2,552**	**100%**

Figure 4: Types of Injuries, 2020

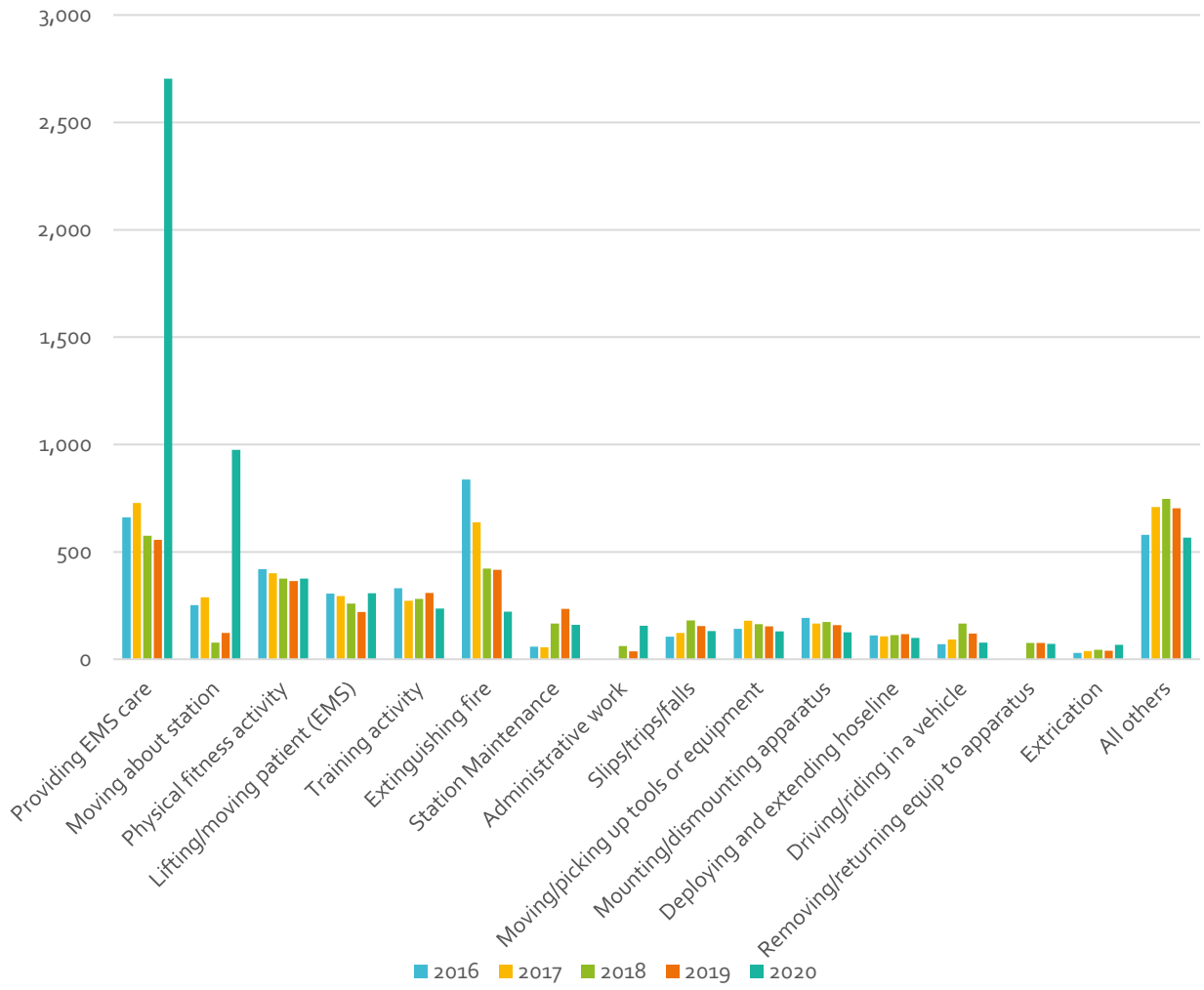


Task at Time of Injury

Table 9: Top 15 Tasks at Time of Injury, 2016-2020 (ordered by 2020, descending)

Task	2016	2017	2018	2019	2020
Providing EMS care	661	728	575	556	2,704
Moving about station	252	289	77	122	975
Physical fitness activity	420	401	376	364	376
Lifting/moving patient (EMS)	306	294	259	220	307
Training activity	331	273	281	309	236
Extinguishing fire	837	638	423	416	222
Station Maintenance	59	55	166	235	161
Administrative work	n/a	n/a	61	37	156
Slips/trips/falls	105	122	181	154	132
Moving/picking up tools or equipment	142	179	163	153	130
Mounting/dismounting apparatus	193	166	173	159	125
Deploying and extending hoseline	111	106	113	117	100
Driving/riding in a vehicle	70	92	166	119	77
Removing/returning equip to apparatus	1	n/a	76	76	71
Extrication	30	38	44	40	68
All others	579	709	747	703	566
Total	**4,097**	**4,090**	**3,881**	**3,780**	**6,406**

Figure 5: Top 15 Tasks at Time of Injury, 2016 – 2020



Injuries by Body Part

Table 10: Injuries by Body Part, 2016 – 2017 (ordered by 2017, descending)

Injured Body Part	2016	2017
Multiple body parts, whole body	1,007	1,064
Hand and fingers	359	365
Knee	376	315
Hip, lower back, or buttocks	283	292
Back, except spine	244	248
Shoulder	238	221
Ankle	192	179
Multiple parts	124	151
Face	116	127
Arm, lower, not including elbow or wrist	109	121
Leg, lower	132	113
Foot and toes	85	87
Head	82	78
Ear	74	76
Chest	82	76
Eye	70	73
Multiple body parts, upper body	61	73
Elbow	47	72
Wrist	74	56
Other body parts injured	342	303
Total	**4,097**	**4,090**

Because TCFP migrated to a new data management system in 2017, the data collected in years 2018-2020 has been categorized differently than it had been in the past. This is why Table 10 only goes through 2017, and we now have new tables (11 & 12) for 2018-2020 data.

Table 11: Injuries by Body Part Type, 2018 – 2020

Injured Body Part	2018	2019	2020
Upper Extremities	864	795	700
Lower Extremities	810	684	616
Back	490	466	445
Multiple Parts	318	255	281
Head	300	327	197
Internal	105	125	144
Chest	104	108	107
Neck	64	56	33
Hip	23	33	29
Total	**3,078**	**2,849**	**2,552**

Table 12: Injuries by Body Part Sub-Type, 2018 – 2020

Body Part by Sub-Type	2018	2019	2020
Back: Back	198	194	191
Back: Buttocks	1	3	2
Back: Lower Back	282	258	248
Back: Neck	4	4	1
Back: Spine	5	7	3
Chest: Abdomen	5	4	2
Chest: Abdominal Area	10	4	9
Chest: Chest	89	100	96
Head: Cheek	5	7	4
Head: Chin	7	1	4
Head: Ear	77	117	50
Head: Eye	64	60	44
Head: Face	111	112	78
Head: Jaw	1	6	2
Head: Mouth	15	16	10
Head: Nose	20	8	3
Head: Skull	n/a	n/a	2
Hip: Groin	9	14	9

Hip: Hip	13	18	18
Hip: Pelvis	1	1	2
Internal: Genito-urinary	4	11	4
Internal: Heart	5	7	4
Internal: Internal	66	71	74
Internal: Intestinal tract	5	4	3
Internal: Lungs	9	11	51
Internal: Stomach	15	20	8
Internal: Trachea	1	1	0
Lower Extremities: Ankle	206	163	135
Lower Extremities: Foot	93	88	78
Lower Extremities: Knee	347	273	252
Lower Extremities: Lower leg	111	97	95
Lower Extremities: Toes	15	22	13
Lower Extremities: Upper Leg	38	41	43
Multiple Parts: Lower Body	26	19	20
Multiple Parts: Unknown	26	11	27
Multiple Parts: Upper Body	74	76	65
Multiple Parts: Whole Body	192	149	169
Neck: Neck	59	49	30
Neck: Throat	5	7	3
Upper Extremities: Elbow	68	44	34
Upper Extremities: Hands	361	326	319
Upper Extremities: Lower Arm	10	59	55
Upper Extremities: Shoulder	234	235	170
Upper Extremities: Upper Arm	112	72	45
Upper Extremities: Wrist	79	59	77
Total	**3,078**	**2,849**	**2,552**

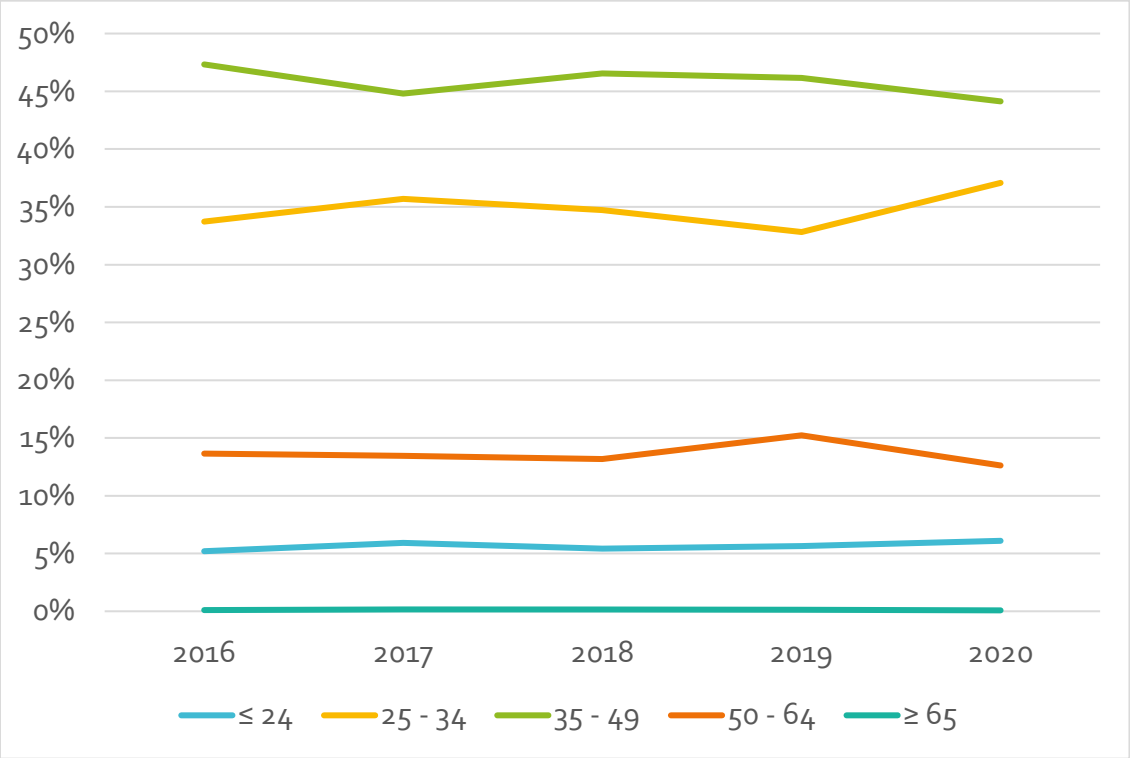
Individuals by Age Group

Table 13: Individuals by Age Group, 2016 – 2020*

Age Group	2016		2017		2018		2019		2020	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
≤ 24	213	5.20%	242	5.92%	210	5.41%	210	5.65%	389	6.10%
25 - 34	1,382	33.73%	1,460	35.70%	1,348	34.73%	1,220	32.82%	2,365	37.07%
35 - 49	1,939	47.33%	1,832	44.79%	1,806	46.53%	1,716	46.17%	2,815	44.13%
50 - 64	559	13.64%	550	13.45%	511	13.17%	566	15.23%	805	12.62%
≥ 65	4	0.10%	6	0.15%	6	0.15%	5	0.13%	5	0.08%
Totals	**4,097**	**100.00%**	**4,090**	**100.00%**	**3,881**	**100.00%**	**3,717**	**100.00%**	**6,379**	**100.00%**

*Includes injured individuals and individuals with exposures.

Figure 6: Individuals by Age Group, percentages, 2016 – 2020



Activities Resulting in Lost Time

Table 14: Activities Individuals Were Doing that Resulted in Lost Time, 2020

Totals

		Days Missed	
Activity	**Count**	**Average**	**Sum**
EMS	562	22	12,457
Station Duties	444	21	9,392
Wellness/fitness	76	47	3,581
Skills training	87	42	3,670
Fire suppression	76	36	2,795
Returning from incident	10	50	509
Rescue - nonfire-related	17	24	415
Responding to incident	16	39	624
Fire prevention	23	14	335
Rescue - fire-related	1	55	55
Hazmat	4	16	66
Total	**1316**	**33**	**33,899**

Table 15: Activities Individuals Were Doing that Resulted in Lost Time, 2020

Between 1 and 30 days

		Days Missed	
Activity	**Count**	**Average**	**Sum**
EMS	499	15	7,495
Station Duties	403	13	5,349
Skills Training	54	12	675
Wellness/Fitness	42	13	547
Fire Suppression	53	9	529
Fire Prevention	22	13	298
Rescue - Nonfire-related	14	15	211
Responding to incident	10	12	122
Returning from incident	6	10	64
Hazmat	3	6	18
Total	**1106**	**12**	**15,308**

Table 16: Activities Individuals Were Doing that Resulted in Lost Time, 2020

Between 31 and 90 days

Activity	Count	Days Missed	
		Average	Sum
EMS	47	45	2,125
Skills Training	23	61	1,421
Station Duties	25	44	1,121
Wellness/Fitness	22	54	1,192
Fire Suppression	11	49	545
Responding to incident	4	52	209
Returning from incident	2	84	169
Rescue - nonfire-related	2	42	85
Rescue - fire-related	1	55	55
Fire Prevention	1	37	37
Hazmat	1	48	48
Total	**139**	**52**	**7,007**

Table 17: Activities Individuals Were Doing that Resulted in Lost Time, 2020

91+ days

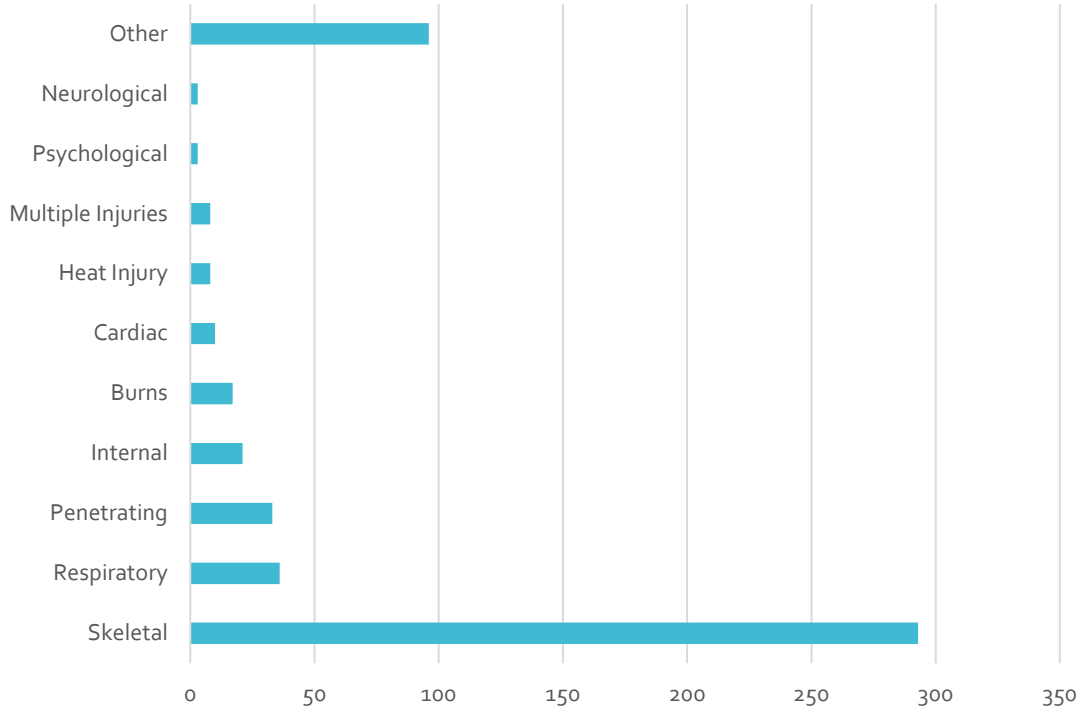
Activity	Count	Days Missed	
		Average	Sum
Station Duties	16	182	2,922
Wellness/Fitness	12	153	1,842
EMS	16	177	2,837
Skills Training	10	157	1,574
Fire Suppression	12	143	1,721
Returning from incident	2	138	276
Rescue - nonfire-related	1	119	119
Responding to incident	2	146	293
Total	**71**	**152**	**11,584**

Types of Injuries with Lost Time

Table 18: Types of Injuries Resulting in Lost Time, 2020

Type of Injury	Count
Skeletal	293
Respiratory	36
Penetrating	33
Internal	21
Burns	17
Cardiac	10
Heat Injury	8
Multiple Injuries	8
Psychological	3
Neurological	3
Other	96
Total	**528**

Figure 7: Types of Injuries Resulting in Lost Time, 2020



Burn Injuries

Table 19: All Burns, 2016 – 2020

All Burns - Types	2016	2017	2018	2019	2020
Thermal (Heat/Fire)	92	96	108	72	80
Scald or Steam	9	13	12	10	11
Chemical	3	4	6	6	2
Electrical	2	0	1	2	3
Totals	**106**	**113**	**127**	**90**	**96**

Table 20: Burns by Body Part Sub-Type, 2020

Body Part Sub-Type	Count
Back: Back	0
Back: Buttocks	0
Back: Lower Back	0
Back: Neck	0
Back: Spine	0
Chest: Abdomen	0
Chest: Abdominal Area	0
Chest: Chest	0
Head: Cheek	1
Head: Chin	3
Head: Ear	12
Head: Eye	3
Head: Face	8
Head: Jaw	0
Head: Mouth	0
Head: Nose	0
Hip: Groin	0
Hip: Hip	0
Hip: Pelvis	0
Internal: Genito-urinary	0
Internal: Heart	0
Internal: Internal	0
Internal: Intestinal tract	0
Internal: Lungs	0
Internal: Stomach	0
Internal: Trachea	0

According to the Texas State Fire Marshal's Office, there were 57,950 fires in 2020.

Lower Extremities: Ankle	1
Lower Extremities: Foot	4
Lower Extremities: Knee	1
Lower Extremities: Lower Leg	1
Lower Extremities: Toes	0
Lower Extremities: Upper Leg	1
Multiple Parts: Lower Body	0
Multiple Parts: Unknown	0
Multiple Parts: Upper Body	11
Multiple Parts: Whole Body	0
Neck: Neck	2
Neck: Throat	0
Upper Extremities: Elbow	1
Upper Extremities: Hands	20
Upper Extremities: Lower Arm	14
Upper Extremities: Shoulder	4
Upper Extremities: Upper Arm	0
Upper Extremities: Wrist	9
Total	**96**

Table 21: Burns by Body Part, 2016 – 2020, Comparison to Historical Data

Body Part	2016	2017	2018*	2019*	2020*
Ear	14	16	17	17	12
Hand and fingers	27	22	30	16	20
Face	16	9	14	10	12
Wrist	9	7	8	11	9
Multiple body parts, upper body	8	4	10	6	11
Eye	0	0	4	5	3
Hip, lower back, or buttocks	1	0	0	5	0
Foot and toes	3	1	6	4	4
Multiple parts	4	12	5	4	0
Arm, upper, not including elbow or shoulder	1	2	11	3	0
Lower extremities	2	0	8	3	3
Chest	1	1	2	2	0
Neck	4	7	2	2	2
Knee	1	2	0	1	1

Shoulder	3	6	9	1	4
Back, except spine	0	2	1	0	0
Elbow	0	1	0	0	1
Pelvis or groin	0	2	0	0	0
Throat	0	0	0	0	0
Arm, lower, not including elbow or wrist	2	12	n/a	n/a	14
Head	2	1	n/a	n/a	n/a
Leg, lower	3	3	n/a	n/a	n/a
Upper extremities	2	0	n/a	n/a	n/a
Neck and shoulders	0	1	n/a	n/a	n/a
Undetermined	3	2	n/a	n/a	0
Total	**106**	**113**	**127**	**90**	**96**

*The 2018, 2019, and 2020 columns were pieced together from the data in Table 20: Burns by Body Part Sub-Type, from the 2018, 2019, and 2020 injury report data. This was done in order to view trends and patterns.

Exposures

Table 22: Exposure by Sub-Type, 2018 – 2020

Exposure + Sub-Type	2018	2019	2020
Chemical: Ammonia	1	3	0
Chemical: Battery Acid*	n/a	4	0
Chemical: Benzene	2	15	1
Chemical: Bleach	1	11	0
Chemical: Not listed	151	160	70
Chemical: Unidentified	73	55	27
Physical: Animal venom	6	17	5
Physical: Meningitis	38	40	33
Physical: Not listed	138	201	42
Physical: Plant toxin	27	14	12
Physical: Radiation*	n/a	4	1
Physical: Unidentified	87	66	13
Physical: UV Light*	n/a	2	1
Respiratory: Blood	69	73	78
Respiratory: COVID 19*	n/a	1	1,715
Respiratory: Influenza	4	19	7
Respiratory: Not listed	108	118	56
Respiratory: Saliva	24	22	28
Respiratory: Tuberculosis	98	76	31
Respiratory: Unidentified	50	37	6
Respiratory: Vomit	7	8	13
Other: Asbestos*	n/a	3	1
Other: Carbon Monoxide*	n/a	1	6
Other: Carcinogenic Substances*	n/a	1	13
Other: Contaminated Water/Sewage*	n/a	4	11
Other: Heavy Metals*	n/a	0	1
Other: Mold*	n/a	0	9
Other: Smoke/Products of Combustion*	n/a	5	19
Other: Virus	n/a	3	1,878
Total	**884**	**963**	**4,077**

*These exposure types were added to the injury reporting application in 2019, which is why they have n/a in the numbers column for 2018.

Table 23: Exposure by Route, 2020

Route	Count
Inhalation	3,208
Absorption	760
Ingestion	59
Injection/Puncture	50
Total	**4,077**

Figure 8: Exposure by Route, 2020, percentages

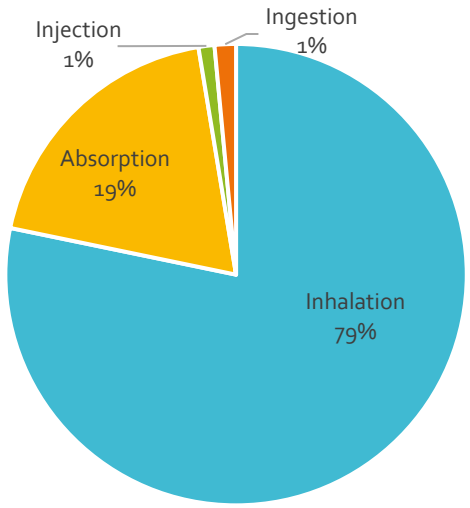


Table 24: Exposure by Substance, 2020

Substance	Count
Gas/vapor	2,029
Liquid	1,560
Solid	488
Total	**4,077**

Figure 9: Exposure by Substance, 2020, percentages

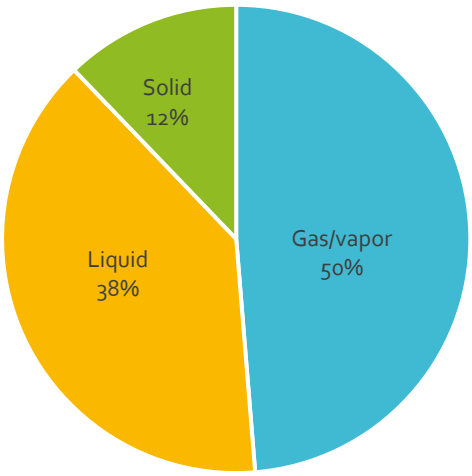


Table 25: Routes of Exposure, Historical Data, 2016 – 2017

Exposure Routes	2016	2017
Airborne pathogens	290	354
Undetermined	273	325
Blood pathogens	194	174
Body Fluids	121	173
Chemical (household/industrial)	310	147
Plant toxins	37	36
Chemical (carbon monoxide)	27	1
Total	**1,252**	**1,210**

Figure 10: Routes of Exposure, Historical Data, 2016 – 2017

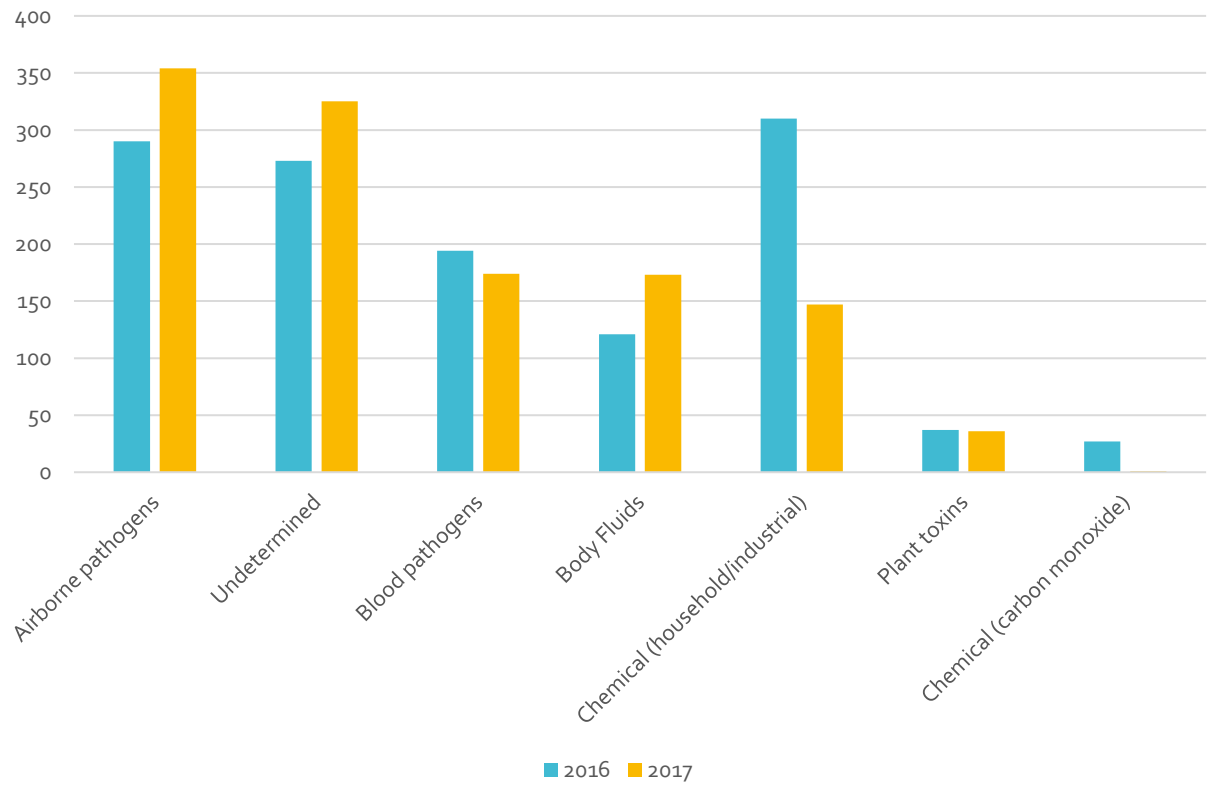


Table 26: Exposure Description, Historical Data, 2016 – 2017

Exposure description	2016	2017
Unknown	148	290
Blood	161	153
Chemicals/household/industrial	310	122
Asbestos	51	112
Tuberculosis	128	109
Body fluids	91	101
Meningitis	62	104
Animals or wildlife	90	58
Sickness, other	24	49
Poison plants	37	37
Vomit	14	17
Chlorine	1	14
Mold	26	10
Airborne, other	40	7
Staph	0	7
Carbon monoxide	26	5
HIV	4	4
Scabies	21	4
Hepatitis C	14	3
MRSA	14	3
Bacterial pneumonia	0	1
Explosive residue	0	0
Influenza	0	0
Lice	0	0
Strep	1	0
Total	**1,263**	**1,210**

Cancer

In June of 2019, the Governor of Texas signed Senate Bill 2551 (SB 2551) which expanded the scope of the law in which firefighters and EMTs who suffer from cancer are presumed to have developed the condition during the course and scope of their employment. The types of cancer this law addresses include:

- cancers that originate at the stomach, colon, rectum, skin, prostate, testis or brain
- non-Hodgkin's lymphoma
- multiple myeloma
- malignant melanoma
- renal cell carcinoma

TCFP received **47** reports of cancer diagnoses from fire departments in 2020:

Skin/Melanoma/Basal Cell/Squamous Cell carcinoma – 10
(Males, ages 34, 36, 37, 37, 38, 38, 50, 50, 53, 56)

Prostate – 9
(Males – ages 48, 52, 53, 54, 58, 58, 59, 60, 62)

Non-Hodgkin's Lymphoma – 7
(Males – 30, 38, 47, 61, 61, 64, 64)

Kidney/renal cell carcinoma – 3
(Males – 50, 51, 51)

Colon – 2
(Males – 25, 42)

Testicular – 2
(Males – 26, 33)

Thyroid – 2
(Males – 29, 30)

Breast – 1
(Female – 49)

A Reminder for Fire Departments

Any injuries to fire protection personnel that are reported to the Texas Worker's Compensation Commission must be reported to the Texas Commission on Fire Protection. This includes cancer diagnoses.

Lung – 1
Male – 30)

Stomach – 1
(Male – 43)

Throat – 1
(Male – 68)

Unidentified – 8
(Males – 31, 43, 45, 49, 53, 59, 61; Female – 18)

The commission strongly encourages fire departments to report cancer diagnoses; the commission recognizes that the number of job-related cancers reported during this time-period represents only a fraction of the cases that Texas fire departments are currently managing. There is a growing awareness of the impact that cancer is having on fire protection personnel nationwide, and the commission urges departments to use this reporting tool to help contribute to the education and awareness of the issue in Texas.

SOP Issues

In 2020 there were 38 injuries attributed to failures of fire protection personnel to follow their departments' standard operating procedures (SOPs). All but a few were instances where the individuals were not wearing their provided PPE/SCBA gear in an environment or situation in which they should have been.

In its compliance inspections, the Texas Commission on Fire Protection verifies that fire departments have written SOPs that cover the appropriate subject matter.

Table 27: Injuries Attributed to SOP Issues, 2020

Activity	Minor	Serious	Total	2019	2018	2017
EMS	11	7	18	11	9	7
Fire Suppression	3	7	10	10	19	9
Skills Training	4	1	5	1	2	2
Responding to Incident	2	0	2	0	1	3
Station Duties	0	2	2	6	1	4
Wellness/Fitness	1	0	1	1	0	1
Totals	**21**	**17**	**38**	**29**	**32**	**26**

Table 28: Injuries Attributed to PPE & PASS Failures, 2020

Activity	Minor	Serious	Total	2019	2018	2017*
Fire Suppression	5	2	7	2	8	n/a
EMS	2	2	4	0	1	n/a
Skills Training	1	0	1	2	2	n/a
Totals	**8**	**4**	**12**	**4**	**11**	**n/a**

*TCFP did not start collecting information on PPE & PASS failures until 2018.

Fatalities

The commission's 2020 injury report includes five fatalities. Fatalities listed in this report include only those reported to the Texas Commission on Fire Protection (TCFP) by the entities it regulates.

The State Fire Marshal's Office conducted three Texas fire fighter fatality incident investigations between September 1, 2018 and August 31, 2019. Comprehensive information about the investigations may be found on their website at the following web address: https://www.tdi.texas.gov/fire/fmloddannuals.html

Recommendations

The commission would like to thank Texas fire departments for their ongoing participation in reporting fire protection personnel injuries. This report would not be possible without their efforts.

Based on their review of the data contained within this report, the commission offers the following recommendations:

[LAST YEAR'S RECOMMENDATIONS BELOW … JUST A PLACE HOLDER UNTIL THE COMMISSION GIVES ITS RECOMMENDATIONS FOR THE 2020 REPORT]

Recommendations for the Texas Fire Service

1. Continue to focus on reducing strains and sprains:
    - Stretching
    - EMS equipment review/patient moving
    - Equipment deployment/apparatus design
2. Continue to focus on reducing weightlifting injuries:
    - Clarify the purpose of weightlifting (functional fitness vs. body sculpting)
    - Review types of exercise routines
3. Focus on safety during non-emergency activities, especially:
    - station duties
    - training exercises
    - wellness/fitness activities
4. Increase cancer reporting and prevention activities:
    - Consider early detection testing
    - Review the Health and Wellness Committee's March 2019 presentation
    - Read *The Lavender Ribbon Report* (download a copy here)
    - Clean everything often
5. Reduce fire ground injuries through prevention:
    - Fire risk analysis
    - Familiarity walk through
    - Pre-planning with focus on firefighter safety and injury prevention

Commission-Adopted Standards

The commission has adopted several NFPA and other nationally recognized standards to help keep Texas fire protection personnel safe. This list summarizes the relationships between some of the Texas laws and national standards and is not intended to be all-inclusive:

Texas Government Code

§419.040, Protective Clothing

§419.041, Self-Contained Breathing Apparatus

§419.042, Personal Alert Safety Systems

§419.043, Applicable National Fire Protection Association Standard

§419.044, Incident Management System

§419.045, Personnel Accountability System

§419.046, Fire Protection Personnel Operating at Emergency Incidents

§419.047, Commission Enforcement

Texas Administrative Code

CHAPTER 425 FIRE SERVICE INSTRUCTORS

§443.9 National Fire Protection Association Standard

CHAPTER 435 FIRE FIGHTER SAFETY

§435.21 Fire Service Joint Labor Management Wellness-Fitness Initiative

§435.23 Fire Fighter Injuries

§435.25 Courage to be Safe So Everyone Goes Home Program

§435.27 Live Fire Training Structure Evolutions

CHAPTER 451 FIRE OFFICER

CHAPTER 457 INCIDENT SAFETY OFFICER CERTIFICATION

Commission's web page

NFPA Standards adopted by the commission

16. Advisory committees including but not limited to committee make up, term limits, and meeting requirements.

17. Matters from the Executive Director:

A. Decisions of Executive Director in contested cases and consent orders.

17. Matters from the Executive Director.

B. Status regarding division functions:

a. Training Approval & Testing – test administered, training approvals, record reviews and online training audits

b. Certification & Professional Development – training applications, IFSAC seals issued, certifications issued, training facilities, curriculum development, library resource requests

c. Compliance – biennial inspections, compliance officers training, issues involving regulated entities

d. Information Technology – public website design, FARM and FIDO improvements, CAPPS (Central Accounting Payroll/Personnel System), IT security policy, service requests

Commission Quarterly Report

Training Approval and Testing Section

- **Test Administration, Training Approvals, Record Reviews, and Training Audits Statistics – 3rd Quarter, FY 2021**
  - **Test Administration** – 7383 exams were administrated during this quarter with a pass rate of 81.76%.
  - **Training Approvals** – Total of 731 training approvals were submitted with start dates during this quarter in the commission's Training Facility Management System.
  - **Record Reviews** – One hundred thirteen (113) record reviews for equivalency were conducted (29 SFFMA/41 out of state or education). One hundred eighty-one (181) Qual numbers were issued in the Training Facility Management System.
  - **Training and Skill Testing Audits** – Seventy-three (73) online training audits were conducted during the 3rd quarter. Thirty-six (36) had no deficiencies noted. Thirty-five (35) had minor deficiencies such as expired passwords which prevented TCFP access to courses, no syllabus attached, no Instructor contact or course schedule and no textbook information. All issues were resolved in one or two days. Two online audits revealed significant deficiencies and was transferred to Compliance for investigation.
  - **Online Testing Centers** – One (1) new online testing center was added during the 3rd quarter: University of Texas – El Paso.
- **Activities for the Next Quarter**
  - Continuing to process testing requests for the new Incident Commander certification which became effective January 1, 2021.
  - Work with our compliance officers to secure locations to schedule "special" test dates for Incident Commander testing.
  - Continue to scout for additional testing centers to fill "gaps" throughout the state.

2021 3rd Quarter: Certification & Professional Development
March 1, 2021- May 31, 2021

	Q1	Q2	Q3	Q4
Certification/Renewal:				
Professional Development Training Applications	2,606	2,889	3,582	
Issued: IFSAC Seals	1,836	1,902	2,239	
TCFP Certifications	4,019	2,919	4,081	
Criminal History	506	502	605	
Medical documents:	907	874	1148	
Confirmation of Commissions (Peace Officer)	74	40	41	
Service time applications	150	80	111	
Renewals: Department Personnel	30,529	77	9	
Certified Training Facilities	0	271	17	
Individual Certified Holders	2,510	166	89	
Registered Seals: IFSAC	456	465	494	
TEEX Proboard	226	179	411	
Total number of Training Facilities	333	341	348	

Quarterly Report – Curriculum Development
March 2021 – May 2021

Meetings (via Zoom)
March 11: Fire Fighter Advisory Committee
April 29: Commission Meeting
Curriculum and Testing Committee

- March 9
- April 19

Meetings: Detail

March 2021 – (Meetings)

- March 3 – ARFF
    - Equipment list – Reviewed equipment list and discussion held to update the ARFF EL to look like BFS.
    - Curriculum Review – Continued the review of the curriculum. Questions came up regarding NFPA 1500 and committee to seek recommendation from C&T.

    - Test Questions – Dave advised the group that there were only two questions that were not in either of the IFSTA manuals and those were referenced to the Federal Aviation Regulations.
- March 9 – C&T
    - BFS Test Questions – review of newly written test questions to cover blanks in correlation sheets.
    - Incident Commander update – 16 exams have been completed with a 81% pass rate with 32 current applications in processing.
    - ISO Low P-Value Test Questions – questions to be sent out to members for individual review.
    - Plan Examiner – Discussion regarding removal of grandfather language and some additional changes to remove references to Inspector in the PE and removal of PE references from Inspector documents.
    - Committee vacancies – there are currently 2 positions open on ad-hoc committees. One for ARFF and one for Inspector. TCFP to start process of filling both positions.
    - ARFF Update – Committee continues to work on updating curriculum package. Did have questions regarding NFPA 1500 reference, the equipment list approval process, and reducing the number of required references in the reference list. All questions were answered and would be taken back to the committee.
- March 11 – FFAC
    - C&T did not present anything before FFAC.
- March 31 – ARFF
    - Update from C&T
        - NFPA 1500 Occupational Safety and Health they recommended to seek BFS for questions used for same and to look at Chapter 8 of 1500 for questions.
        - Equipment List does have to go before the C&T, FFAC and Commission for approval so update of skills would be necessary for completion of EL.
        - Committee Vacancy – the position is advertised on TCFP website and will be taking applications until May 28th, 2021.
    - Curriculum Review – continued the review of the curriculum.
    - Reference List – Committee discussed reducing the amount of reference in the required list. Couple members agreed to review reference list and compare to IFSTA manual to not double up the references.

April 2021 – (Meetings)

- April 14 – ARFF
    - Curriculum Review – committee completed the final review of the curriculum.
    - Reference list – completed the reference list. Corrections to be made and final approval at next meeting.
    - Test questions – reviewed a couple of test questions from the BFS test bank to fit the NFPA 1500 requirements.
- April 19 – C&T
    - Discussion on the roles of the C&T and upcoming meetings concerning all committees.
    - BFS test questions – review of pilot questions and new questions.
    - Incident Commander update – 114 exams given with a 76% average score.
    - Basic Fire Inspector/Plan Examiner – reviewed the recommended changes for complete separation of these two certifications.

    - ARFF committee update – working on updating the reference list, curriculum, and equipment list.
- April 28 – ARFF
    - Performance skills – committee began the review process for all skills.
    - Equipment list – additions were made to the EL after noticing items listed on skills but not on the EL.

May 2021 – (Meetings)

- May 12 – ARFF
    - Performance skills – continued the review of all skills. Reorganization of the skill table to align all objectives together and separation of skill 11.
    - Equipment List – completed the final review.
    - Reference List – completed the final review.
    - C&T – prepared all documents (Curriculum, Reference and Equipment Lists for approval.
- May 20 – C&T
    - ARFF Curriculum Review – Curriculum, Reference List and Equipment List were all reviewed and approved by C&T. These will be forwarded to FFAC.
    - Basic Fire Inspection/Plan Examiner – these documents have been updated to separate the certifications. These will be forwarded to FFAC.
    - Commission meeting report
    - BFS Test Questions – reviewed FF-2 pilot questions.
    - Incident Commander Update – 161 tests completed with a passing average of 76.57.
    - FIDO Skills – discussion regarding FIDO drawing skills from previous curriculums and not current.
    - Compliance asked if there has been any further discussion on NFPA 1041 Live Fire Instructor. Currently there is no plan to move to this certification.
- May 27 – ARFF
    - Performance skills – continued the review of all skills.
    - Update C&T – Committee approved of all the documents and all items will be forwarded to FFAC.

Library 3rd Quarter Report FY21

	Q1	Q2	Q3	Q4
Items loaned				
A/V items	0	0	0	
Print items	2	1	0	
New borrowers	4	1	0	
Responses to borrower follow-up surveys	0	0	0	
Items cataloged				
A/V items	8	0	0	
Print items	0	0	0	
Desk copies	11	0	0	
Research and reference requests				
Internal requests	1	0	0	
External requests	1	0	0	
Hours	2	0	0	
Other duties				
Job postings	223	212	217	

Compliance Report for 3rd Quarter FY21
March, April, May 2021

- In preparation for compliance officer participation in the Ad Hoc Committees which will review Texas Administrative Code Chapter 427 Training Facility Certifications and 435 Fire Fighter Safety, the compliance team continues to brainstorm for improvement recommendations to these rules with emphasis on the compliance enforcement activity perspective.
- The Compliance Team continues to meet monthly on-line for training, coordination, and communication of compliance activities.
- The Compliance Manager completed the course required to have access to criminal history records pertaining to TCFP certification requirements. The training meets level 3 security awareness training for criminal justice information services.
- All Compliance Team members completed the mandatory agency Information Systems Computer security awareness training.
- The Compliance Team received on-line time keeping requirement training from TCFP Human Resources Officer Amanda Khan.
- The Compliance Team participated in the TCFP Information Technology system stress testing for Azure Cloud Migration.
- The Compliance Officers coordinated with local fire departments and training facilities to schedule regional meetings. These meeting are intended to improve outreach and communications and to answer questions from TCFP regulated entities. The TCFP Executive Director, TCFP program managers, and compliance officers are attending these meetings.
- The following meetings occurred during this reporting period:
    - April 7, hosted by Texas Fire Chiefs Association Conference in College Station,
    - April 14, hosted by Fire Chief Rogelio Esparza, El Paso County ESD #2, Region 2 – Tim Gothard
    - May 4, hosted by Raymond Murry CASCO, Hallsville, Texas. Region 4 – Brain Meroney and Region 5 - Lamar Ford
- The following Regional Meetings are scheduled for the future:
    - **June 29, 2021,** 1 pm. Hosted by Fire Chief Curtin Poovey, Richardson Public Safety Complex, 200 N. Greenville Ave. **Richardson, TX** 75081. Region 4 - Brain Meroney.
    - **June 30, 2021,** 10 am. Hosted by Chief Steve Keller Tarrant County College, 4801 Marine Creek Pkwy, **Fort Worth, TX,** 76179. Region 3 - Rick Wallace.
    - **July 8, 2021,** 1 pm. Hosted by Fire Chief Terry Morton, Nederland FD, Southeast Texas Regional Planning Commission, 2210 Eastex Freeway, **Beaumont, TX,** 77703. Region 5 – Lamar Ford.
    - **July 9, 2021,** meeting at 9 am. Hosted by Fire Chief Palmer Buck, Woodlands FD Emergency Training Center 16135 I-45 S. **Conroe, TX.** Region 6 – Ernie Null.

- **August 2, 2021**, 9:00 a.m., hosted by San Marcos Fire Chief Les Stephens, Hays County BBQ, 1612 S Interstate 35, San Marcos, Texas 78666. Region 7 – Tim Gardner.
- **September 3, 2021,** 10:00 a.m. Fire Chief: Robert Rocha, Corpus Christi FD, Port of Corpus Christi, Solomon Ortiz Center, 402 Harbor Drive, Corpus Christi, Texas 78401. Region 7 - Tim Gardner
- **October 5, 2021,** 10:00 a.m. hosted by Fire Chief: Rafael Balderas, Harlingen, FD Admin Office EOC Room, 24200 N FM 509, Harlingen, Texas 78550, Region 7 – Tim Gardner
- **October 20, 2021,** 10:00 a.m. hosted by Fire Chief: Shaun Fogerson, Lubbock Fire Training Center, 1515 E. Ursuline St. Lubbock, Texas, Region 2 – Tim Gothard

IT 3rd Quarter report FY21

- TCFP Websites and Web Applications Uptime 99.5%
- Database back up orchestration updated
- Azure Cloud
    - Conducted stress test for apps
    - Dry run migrations
- FionaCore updated with IFSAC code switch and email task wait
- FARM and FIDO updated
    - Performed bug fixes
    - UI & Backend improvements
- Public website updated
    - Individual & Department search page
    - Verify pages for
        - Ifsac
        - Certification
        - Wallets
- Docs updated
    - Added Help view sample documents
    - Added security features to certificates and wallets.
- Addressed 311 Service Request (Tickets)

18. Personnel matters regarding the appointment, employment, compensation, evaluation, reassignment, and duties of the Executive Director.

19. Adjourn meeting.