# Delaware State Fire School National Certification Candidate Handbook

Fire Officer II NFPA 1021-2020





# Delaware State Fire School

Providing Fire, Rescue, Emergency Medical Training and Public Fire Safety Education

1461 Chestnut Grove Road, Dover, Delaware 19904 – 302-739-4773

Website: https://www.statefireschool.delaware.gov

The Delaware State Fire School is accredited by IFSAC, the International Firefighter Service Accreditation Congress, and the Proboard, the National Board on Fire Service Professional Qualifications.

The Fire School is accredited in the following disciplines, noted by the emblem of the accrediting entity:

The Fire School is accredited in the following disci	plines, n
<u>Firefighter NFPA 1001 - 2019</u> Firefighter I	PRO
Firefighter II	
Fire Instructor NFPA 1041 - 2018	BOARD
Fire Instructor I	PRO
Fire Instructor II	PRO
Fire Instructor III	BOARD
Live Fire Instructor	BOARD
Live Fire Instructor-in-Charge	PROBOARD
Fire Officer NFPA 1021 - 2020	PRO* BOARD
Fire Officer I	PRO BOARD
Fire Officer II	PRO BOARD
Fire Officer III	PRO
Fire Officer IV	PRO
<b>Driver Operator NFPA 1002 - 2017</b>	MOARD MARKETON
Driver Operator Apparatus with Pumper	PRO BOARD
Driver Operator Apparatus with Aerial	PRO BOARD
Driver Operator Apparatus with Tiller	PRO BOARD
Driver Operator Mobile Water Supply	PRO
Hazardous Materials NFPA 1072 - 2018	
Hazardous Materials Awareness	PROBOARD
Hazardous Materials Operations	PROBOARD
Hazardous Materials Technician	PRO
Hazardous Materials Incident Commander	PRO
Hazardous Materials NFPA 472 - 2018	
Hazardous Materials Branch Officer	PRO BOARD
Hazardous Materials Safety Officer	PRO BOARD
Rescue Technician NFPA 1006 - 2013	ACCEPTATION AND ACCEPTATION ACCEPTATION AND ACCEPTATION ACCEPTATIO
Rope Rescue, Level I & II	PROBOARD
Confined Space Rescue, Level I & II	PRO
Rescue Technician NFPA 1006 – 2013	
Passenger Vehicle Rescuer Awareness	PRO BOARD
Passenger Vehicle Rescuer Operations	PRO BOARD
Passenger Vehicle Rescuer Technician	PROBOARD
Health & Incident Safety 1521 - 2020	
Incident Safety Officer	PRO BOARD
Industrial/Brigade NFPA 1081 - 2017	
Advanced Exterior Brigade	PRO BOARD
Incipient Brigade	PRO BOARD
Small Unmanned Aircraft System	- Land

NFPA 2400 - 2020 Visual Observer

Remote Pilot In Command

Name	Date
Objective	Develop a policy or procedure that addresses an administrative problem. [NFPA® 1021, 5.4.1, 5.4.6]

### **Directions**

- 1. Answer the following question:
  - What are the steps necessary for determining the need for a new or revised policy for the fire department? List and describe these steps on a separate document.
- 2. Read the scenario below then describe your course of action to develop a new fire department policy based on the situation(s) presented.
- 3. Prepare the policy procedures on the blank SOP form provided.

### Resources

- Scenario
- Example Exchange Policy
- Blank SOP Form

### **Scenario**

# **Shift Exchange Policy Development**

The Chestnut Grove Fire Department has been utilizing an informal method to allow members to exchange shifts with other members of the department. Recently, there have been several problems with the old method, including:

- Members of unequal rank or qualifications exchanging shifts. This has resulted in reduced performance for the company.
- Multiple exchanges (three or more party exchanges) have led to confusion as to who was working when.
- Missed shifts because the date of the exchange was forgotten by one of the parties in the exchange.
- On at least one occasion a firefighter worked four shifts (96 hours) in a row because of exchanges that were made. Fortunately, there were no major emergencies during the final tour of duty that required an emergency response.
- A firefighter became ill and could not fulfill an exchange agreement. This required the originally scheduled employee to report to work, missing a long planned trip with their family. This caused a rift in the department because many felt that both were right and fire administration was being overly harsh in its enforcement of the full staffing policy.

The City's Human Resources Department has also expressed frustration with the current method. The City's legal council is also concerned about how the system works, feeling that there may be potential liability to the City if a firefighter is injured while working a shift exchange under the current rule. They both have been pressuring Chief Nabors to adopt a

policy that clarifies the provisions of a shift exchange policy that can be tracked and complies with labor rules for hours worked by firefighters. Chief Nabors has appointed you to begin the development of this new policy.

The elements of a new policy should include the following:

- Shift exchanges can only occur between firefighters of equivalent rank.
- Duty exchanges must be initiated a minimum of two weeks prior to the first exchange date.
- All exchanges must be approved by the company officers of the personnel entering into the agreement.
- Firefighters participating in a shift exchange can work no more that 48 hours in a row.
- Shift exchanges are between two firefighters; three or more parties are not allowed in an exchange.
- Exchanges may not be made while an employee is on probation.
- Once an exchange is finalized, the firefighter who agreed to the exchange is committed to the shift agreed upon.
- Firefighters who become ill prior to or during the exchange shift must use their own sick leave for the absence. All fire department attendance policies are applied to the exchange employee.
- There are no limits on the number of exchanges an employee may enter into in a given year as long as the other limits imposed by the policy are adhered to.

To help get started, you have obtained an Exchange Policy from a neighboring department, the Nextdoortown Fire Department, as an example of some of the information that might be included in the Chestnut Grove Fire Department policy. A copy of the policy is shown below.

## **Example Exchange Policy**

FIRE DEPARTMENT OPERATIONS	NEXTDOORTOWN FIRE DEPARTMENT FIRE DEPARTMENT OPERATIONS
SHIFT EXCHANGE POLICY	
	S.O.G. 111.A
	February 2, 2014
	Approved by: Cliff Jones
	Page 1 of 1

### **PURPOSE:**

To establish a policy for the implementation of a shift exchange policy to permit shift trades between fire personnel of equivalent rank.

### SCOPE:

This procedure applies to all employees assigned to the suppression division of the Nextdoortown Fire Department and work a 24 hour shift schedule.

### PROCEDURE:

Duty shift exchange is permitted between two agreeing members of the department.

The members must each be of equivalent rank and possess identical qualifications so that the performance capabilities of the department are not degraded during the exchange.

All exchanges occur at change of shift time and remain in effect for the entire shift.

All exchange of shift agreements must be approved by the battalion chief of the shift and the company officers where the exchanges occur.

Ensuring that all fire department staffing requirements are met as the result of a shift exchange are responsibilities of the parties in the exchange. Employees remain responsible and will be held accountable for the shifts they are originally scheduled to work.

# **Blank SOP Form**

FIRE DEPARTMENT OPERATIONS	CHESTNUT GROVE FIRE DEPARTMENT FIRE DEPARTMENT
DUTY EXCHANGE	OPERATIONS
	S.O.P. 734.01
	DATE Approval: EJN
	Page 1 of
PURPOSE:	
SCOPE:	
POLICY:	

Policy Development

Delaware State Fire School, Fire Officer II

Candidate: Date:						
Fire	e Officer II – 1021 NFPA -2020	Skill	Sheet	# 1		
Poli	cy Development	Objective(	(s) 5.4.	1, 5.4.	6	
Evalu	ator Instructions: The candidate shall identify a problem within the	neir organization and develop a w	vritten pol	icy to addr	ess the p	roblem.
	ion: N/A					
	rmance Outcome: The candidate shall be able to sufficiently ident evelop a plan of evaluation to determine the effectiveness of the p		lop a poli	cy to addre	ess the pr	oblem,
Requi	red Equipment: Pen and paper, or a computer with word processing	ng.				
No.	Task Steps		First	Test	Re	test
			P	F	P	F
1.	Identify a problem where a policy is needed.					
2.	Research and review applicable:  a. Local, regional, and national regulations or laws b. Neighboring agency policies and procedures					
3.	Evaluate collected data.					
4.	<ul> <li>4. Develop a written policy, using correct grammar, in same style and format as AHJ policies and procedures that includes: <ul> <li>a. Policy that best meets the identified issue</li> <li>b. Policy evaluation to determine effectiveness of the new policy.</li> <li>c. Proposed policy implementation schedule</li> </ul> </li> </ul>					
5.	Follow department or AHJ policy for review and adoption	n of policy.				
6.	Gather written policy and any research documentation and utilize the department records system to store documentation.					
	Evaluator Date	Candidate			Date	

Name	Date
Objective	Construct a departmental budget that addresses capital, operating, and personnel costs. [NFPA® 1021, 5.4.2]

### **Directions**

- 1. Using the information described in the scenario below, develop a detailed budget for a new departmental program. Use the blank Project Budget Worksheet to create the budget.
- 2. In a memorandum format, prepare a *project proposal* that includes 1) a description of the project, and 2) a program justification. Use the blank memorandum form to assist you.

### Note:

When you have completed both forms, attach the Project Budget Worksheet to the program justification memo and submit them together.

### Resources

- Scenario
- Budget Worksheet
- Memorandom Form

### **Scenario**

# **ISO Budget Request**

The Chestnut Grove Fire Department has identified the need to establish an incident safety officer (ISO) program at the company level. The chief has requested that you prepare a program budget request to begin the implementation process for this position. The justification of the program is that it is required by NFPA® 1500, *Standard on Fire Department Occupational Safety and Health Program*. Additionally, there have been three serious injuries during fire operations in the last 12 months. It has been determined by the fire department and the Anytown Association of Fire Fighters (AAFF) that each of these accidents could have been prevented or minimized if an ISO had been present.

You determine that all officers on the department (10 personnel) should receive a two-day course from a qualified instructional source on ISO. Following the course, an ISO kit would be placed in the battalion chief's vehicle for use by the ISO. The kit will contain a vest, ISO helmet, notebook, digital camera, and tape recorder. All these materials must be purchased. After the course is complete and items are purchased, an available officer at each scene would be appointed by the IC to be the ISO.

You have visited with the deputy chief for operations, John Larston. He has directed you to put the proposal in a memo to him. He recommended that the memo clearly explain the program, the justification, and the benefit to the department. Also, he recommended that a budget worksheet be completed on the cost of implementing the program.

The following is information about the overall project, equipment that will be required, and training that will be received by those participating in the class:

• The two-day course will cost \$25 per person, not including the textbook. The textbooks are \$48 and each student must have one.

- On each day you must pay overtime for two (2) captains and two
   (2) lieutenants. The overtime rates per hour are \$16/hr and \$12/hour respectively. You should anticipate each day's class being 8 hours long.
- The equipment costs are listed below.
  - o Leather case \$150
  - o ISO vest \$35
  - Metal notebook/binder \$22
  - o Digital camera (waterproof) \$750
  - o Mini-cassette recorder \$80
  - o ISO helmet \$175
  - o Office Supplies (Annual) \$200

These are startup costs for the program. An annual budget item for continuing training and for the replacements to the program as vacancies occur will be necessary.

# **Project Budget Worksheet**

# CHESTNUT GROVE FIRE DEPARTMENT

# **PROJECT BUDGET WORKSHEET**

# <u>Personnel</u>

Budget Iter	m	Cost
	Total	

# **Operating**

Budget Item	Cost
Total	

# Total Proposed Project Budget

Personnel	
Operating	
Total	

### **Memorandum Form**

Chestnut Grove Fire Department 15401 Redline Avenue Chestnut Grove, USA

Memo	
Date:	
To:	
From:	
Subject:	_

Delaware State Fire School, Fire Officer II	Budget Development

Candidate:	Date:

Fire Officer II – 1021	NFPA - 2020	Skill Sheet # 2
Budget Development		Objective(s) 5.4.2

Evaluator Instructions: The candidate shall be able to organize a small project or station budget, explain the sources of funding and costs, and present any needed justifications.

Location: N/A

Performance Outcome: The candidate shall be able to sufficiently develop a budget for a small project or station budget, organize the data, and prepare it for presentation or a written document to present to superiors.

Required Equipment: Pen and paper, or a computer with word processing.

	Needs In	nprovement 1 - 2	- 3 Ef	fective - 4 - 5 Exc	eeds Minimum St	andards
Determine Budget Schedules	Does not determine the department's budget schedules and guidelines.	Determines department's budget schedules and guidelines but is incomplete or incorrect.	dej	Determines the partment's budget lules and guidelines.	Uses past budget schedules to help project new schedules and guidelines.	Creates written timeline that outlines budget schedules and guidelines.
Determine Funding	Does not identify/itemize projected expenses nor determine the amount of available funding or list possible outside funding sources/ grants.	Identifies/itemizes projected expenses, determines the amount of available funding, and lists possible outside funding sources/grants, but does so incorrectly.	Identifies/itemizes projected expenses of project or division from departmental needs assessment for operating, capital, and personnel costs. Determines the amount of available funding and compiles a list of possible outside funding sources or grants.		Requests peer input on projected expenses and costs, as well as outside funding sources or grants.	Creates additional options if outside funding sources or grants become unavailable.
Complete and Present Budget	Does not identify/itemize projected expenses nor determine the amount of available funding or list possible outside funding sources/ grants.	Identifies/itemizes projected expenses, determines the amount of available funding, and lists possible outside funding sources/grants, but does so incorrectly.	Identifies/itemizes projected expenses of project or division from departmental needs assessment for operating, capital, and personnel costs.  Determines the amount of available funding and compiles a list of possible outside funding sources or grants.		Requests peer input on projected expenses and costs, as well as outside funding sources or grants.	Creates additional options if outside funding sources or grants become unavailable.
Comments:						
Circle One: Product or <i>Process</i>	Overall Score:		/15	PASS	No	Yes

Evaluator	Date	Candidate	Date
Delaware State Fire School			2/24

Name	Date
Objective	Analyze a scenario to determine the point of origin and

# **Objective**

Analyze a scenario to determine the point of origin and preliminary cause of the fire. [NFPA® 1021, 5.5.1]

### **Directions**

- 1. Read the scenario provided below.
- 2. Using the blank Origin and Cause Report worksheets, create a detailed report that determines:
  - The point(s) of origin of the fire described in the scenario
  - The cause of the fire

### Note:

Your narrative should provide justification for all decisions and include the following additional information:

- A floor plan drawing of the structure that includes notation of pertinent evidence locations regarding the fire
- A field sketch of the site where department apparatus were located during suppression operations

Use the blank field sketch and floor plan forms to create your additional documents. An illustration of the incident structure has also been provided to assist you. Assume you will be sending the report, along with all accompanying materials, to the Fire Marshal.

### Resources

- Scenario
- Origin and Cause Worksheet

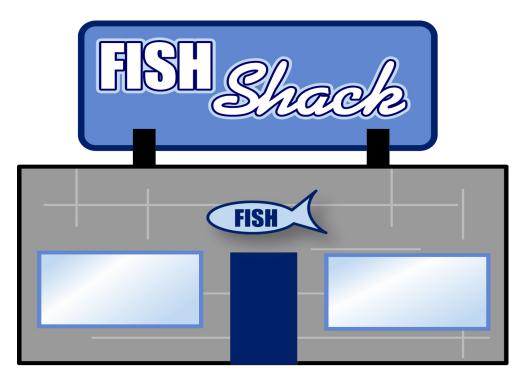
### **Scenario**

Chestnut Grove Fire Department Engine 5, commanded by Captain Smith, has been dispatched to a reported structure fire at 02:30 hours, February 15th, at 9120 West Olive Avenue. West Olive Avenue is a one-way street with east-bound traffic only. Engine 7 and Ladder (Truck) 4 are also assigned to the alarm. Engine 5 is the first unit on the scene and is positioned on the northeast corner of the structure. Captain Smith finds that light smoke is coming from the open front door of the building and flames are visible through a window located next to the door. The structure houses the Fish Shack, a small fishing, tackle, and bait shop. Captain Smith orders a 1¾" (45 mm) attack line to the front door to begin suppression operations. While preparing to enter with the attack crew, he notices a small fire burning in the northeast corner of the front showroom. As the crew enters the room, he sees flames behind the west service counter at the back of the room. This is a small fire inside of a 32-gallon (128 L) plastic trash receptacle located against the west wall. He has the hose crew advance and extinguish this fire after they put out the fire in the northeast corner. Ladder (Truck) 4 arrives and is positioned at the front of the structure. Captain Smith assigns L-4 to shut off utilities and check the rear of the structure. While they are doing this, they notice that the rear door that leads to a storage area is open and a small fire is burning in the southeast corner in a pile of cartons and paper. Engine 7 arrives, lays a 5" (125 mm) supply line from the hydrant 200 feet (60 m) west of the structure to E-5, and positions beside E-5 to the east of the structure. Captain Smith orders E-7 to advance a 1¾" (45 mm) attack line from E-5 to the rear door and extinguish the fire that L-4 located.

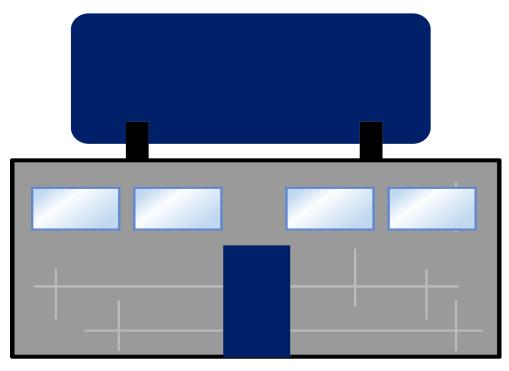
With all fires extinguished, Captain Smith begins the investigation. The front door shows no signs of forced entry. In the front of the structure, located behind the west service counter, he finds an empty can that contains a trash can of lighter fluid. Also found in the bottom of the trash receptacle with other debris are the remains of six matches taped together around what appears to be a burnt cigarette filter. Further examination at the front of the store finds a similar device in the northeast corner of the

front of the store in a rack of burned clothing. Continuing to the stock room at the rear of the building, Captain Smith locates newspapers that have been tightly wadded on top of the cardboard and paper that had burned in the southeast corner. During his investigation, Captain Smith finds a small natural gas jet on the tackle repair table in the "ON" position. This table is located on the east wall of the stock room.

The incident structure's dimensions are  $24 \times 48$  feet  $(7 \times 15 \text{ m})$  with a wall at the mid-point of the structure. A doorway in the middle of this wall has display counters on either side. There is a non-rated door in the middle of this wall that leads to the stock room. There is a plate glass front door set in a metal frame and a steel door at the rear of the structure. Each of the doors are located at the mid-point of the front and rear walls.



9120 WEST OLIVE AVENUE Front View



9120 WEST OLIVE AVENUE Rear View



# CHESTNUT GROVE FIRE DEPARTMENT Origin and Cause Report

Delaware State Fire School, Fire Officer II	Fire Investigation



# FIELD SKETCH





Candidate:	Date:	
candidate.	Date.	

Fire Officer II – 1021	NFPA - 2020	Skill Sheet # 3
Investigate the Cause and Origin of a Fire		Objective(s) 5.5.1

Evaluator Instructions: The candidate shall review an incident scenario in which a fire has occurred, identify and review the findings, analyze provided data, and suggest any workplace training or work practice controls to implement in a written document.

Location: N/A

Performance Outcome: The candidate shall be able to sufficiently review the information gathered from the simulated investigation and interviews provided, summarize the information in a written document including floor and site plans, determine a hypothesis as to the cause and origin, and identify the methods and resources to test their hypothesis.

Required Equipment: Pen and paper, or a computer with word processing.

	Need	s Improvement 1 - 2 -	3 Effe	ctive - 4 - 5 Ex	ceeds Minimum Stand	lards
Interview Witnesses and Examine Scene (or Interpret Provided)	Does not interview witnesses/first responders; does not examine the exterior/interior of the scene.	Does not interview, witnesses/first responders correctly; examines either exterior or interior of incident scene, but not both; the examination is not thorough.	respo the e edge	rview witnesses and other first onders; examine exterior, outside , and interior of incident scene.	Takes notes or documents interviews/examinations.	Takes pictures for the examination, and/or video records the interviews, if possible.
Analyze Data	Does not analyze specifics of incident data.	Analyzes specifics of incident data but doesn't use inductive reasoning.	inci	yzes specifics of dent data using ctive reasoning.	Uses peer input to help analyze the data.	Wrote a quick summary of the analysis.
Develop and Test Hypothetical Fire Scenario	Does not develop a hypothetical fire scenario.	Develops hypothetical fire scenario but does not use incident data specifics; the hypothetical scenario is developed but is not plausible according to incident data; incorrectly tests hypothetical fire scenario(s) so that ignition source cannot be identified.	Develops hypothetical fire scenario using incident data specifics by identifying possible ignition sources, materials first ignited, and ignition sequences; develops alternative hypothetical fire scenario, if needed; tests hypothetical scenario(s) using deductive reasoning.		Tests alternative hypotheses using data from current and past incidents.	Consults outside resources while testing alternative hypotheses.
Comments:			<u> </u>			
Circle One: Product or <i>Process</i>	Overall Score:		/15	PASS	No	Yes

Name	Date	
Objective	Develop a post incident analysis (PIA). [NFPA® 1021,	
	5.6.2. 5.6.37	

### **Directions**

- 1. Read the incident dispatch record provided below.
- 2. Using the blank Chestnut Grove Fire Department Postincident Analysis Information Form, prepare a detailed PIA report that focuses on the activities of the participants, the elements of the emergency, and the decisions that were intended to control the incident. An apparatus location diagram has been included in the PIA form to assist you.

### Note:

- Be sure to review the incident operation objectively and in a constructive manner.
- Identify effective procedures (*strengths*).
- Identify areas needing improvement (weaknesses).

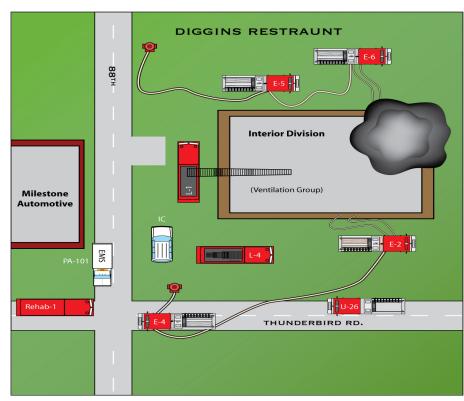
### Resources

- Post Incident Analysis Form
- Dispatch Record

# **Chestnut Grove Fire Department Postincident Analysis Information Form**

Date of Incident:/	Time of Incident:
Weather Conditions:	Temperature:
Wind Speed and Direction:	
Initial Report By:	
Initial Report Summary:	

# Responding Units



(Not To Scale)

Outside Agencies Requested
Medical:
Law Enforcement:
Mutual Aid:
Analysis of Incident
Size-up:
Incident Action Plan:
Consider safety, extinguishment, search and rescue, accountability, communications, etc.
Overall Analysis
Strengths:
Weaknesses:

# **Dispatch Record**

### Incident Number 14-00285

Time	Speaker	Communication
0326	911 Call:	Smoke from Diggins Restaurant on Thunderbird Road.
0327	Alarm Room:	Dispatches E-2, E-4, and L-4
0328	E-2:	All units responding.
0330	Alarm Room:	Reports weather conditions. Light rain. Wind out of the northwest at 7 mph (11 km/h). Temperature at 37°F (3°C). Reports fire scene conditions. Heavy black smoke, unknown occupancy.
0338	E-2:	On scene
0340	E-2:	Size-up: 50 X 100 feet (15 X 30 m) frame structure with smoke showing. Establishes Thunderbird Command. In offensive mode, advancing an attack line to the front door of the building.
0345	E-4, L-4:	On scene. Awaiting assignment.
0346	Command (E-2)	: E-4 to establish water supply for E-2. L-4 to perform search and rescue and RIT. Two personnel for S&R, two for RIT.
0346	E-4, L-4:	Confirms orders.
0348	L-4:	Starts primary search (right-hand search pattern).
0349	E-4:	Establishes water supply. Shuts off utilities.
0349	Command:	Makes entry into structure on south side (Thunderbird Road side) with two personnel.

Time	Speaker	Communication
0351	L-4:	Reports fire location at northeast corner of structure.
0351	Command:	Acknowledges fire location. Requests BC, EMS, Mutual Aid
0351	Alarm Room:	Dispatches BC-19, ISO-19, PA-101, Rehab-1, E-5, E-6, L-1.
0353	BC-19:	Responds with ISO-19, PA-101, Rehab-1.
0353	Command:	Initiates fire attack. Requests E-4 pull second handline for interior attack.
0354	E-5:	Responds with E-6, L-1
0355	L-4:	Establishes RIT.
0355	E-4:	Confirms order. Makes entry with second handline for interior attack with two personnel.
0356	BC-19:	On scene. Assumes Thunderbird Command. Assigns E-2 as Interior Division. Operations remain in offensive mode with an interior attack by E-2, E-4, and L-4.
0358	ISO-19:	On scene with PA-101, Rehab-1. Conducts 360-degree scene safety inspection.
0359	Alarm Room:	Inquires about primary search.
0400	E-5:	On scene with E-6, L-1.
0400	ISO-19:	Establishes rehab area on the southwest corner of 88th and Thunderbird Road.
0401	L-1:	Raises aerial to roof. Attempts vertical ventilation.
0402	E-5:	Establishes Diggins Command. Assigns E-6 with fire attack.

Time	Speaker	Communication
0403	Command:	Questions E-5 "What are you guys doing? I've already established Thunderbird Command."
0403	Alarm Room:	Notes no response from E-5 to Thunderbird Command.
0405	E-2:	Reports fire extinguishment. Begins overhaul.
0405	ISO-19:	Initiates accountability check.
0406	All Units:	Responds with accountability.
0406	ISO-19:	Reports 100% accountability for E-2, E-4, L-4, PA-101, and Rehab 1. Reports confusion with E-5, E-6, and L-1.
0408	Command:	Acknowledges accountability report. Questions E-5 for second time.
0408	Alarm Room:	Notes no response from E-5 to Thunderbird Command.
0410	E-2:	Completes overhaul. Recommends stop loss.
0411	Command:	Acknowledges stop loss.
0412	E-2:	Exits structure with E-4 and L-4 (total of six personnel).
0422	Command:	States confrontation with E-5 (mutual aid). Clarifies scene management.
0423	Command:	Assigns E-2, E-4, and L-4 personnel to reservice apparatus and return to fire department.
0424	Command:	Terminates Thunderbird Command.

Candidate:	Date:

Fire Officer II – 1021	NFPA - 2020	Skill Sheet # 4
Develop a Post Incident Analysis		Objective(s) 5.4.5, 5.7.1

Evaluator Instructions: The candidate shall develop a post-incident analysis (PIA) for a multi-unit response.

Location: N/A

Performance Outcome: The candidate shall be able to sufficiently review and create a written document containing for presentation a summary of an incident, identifying areas of success and areas of improvement, including an executive summary, according to any department or AHJ policies and procedures.

Required Equipment: Pen and paper, or a computer with word processing.

	Needs In	nprovement 1 - 2 -	· 3 Effective - 4 - 5 Exc	eeds Minimum St	andards
Analyze and Assemble Information	Does not gather applicable data from on-scene resources or analyze/assemble information to draft a clearly written PIA.	Gathers and assembles information/data, but information/ data is not applicable or incomplete.	Gathers applicable data from on-scene resources and analyzes/assembles information to draft a clearly written PIA focusing on strategies and tactics, safety issues, incident successes, lessons learned, and recommendations for future training.	Communicate with other personnel during information gathering to achieve a full picture of the incident.	Documents and organizes size-up information so it is easily accessible throughout IAP development and implementation
Finalize PIA Document	Does not create a final PIA document and executive summary for use in post-incident analysis	Creates a final PIA document and executive summary but does not distribute PIA document/executive summary	Compiles results of analysis into final PIA document for use in post-incident analysis and executive summary; PIA documents are formatted correctly and are free of grammatical errors.	Ensures PIA document is peer- reviewed	Prepares PIA for publication in peer-reviewed fire science journals.
Conduct PIA	Does not record the PIA in the department records system; does not plan to implement PIA recommendations.	Schedules a time/location for analysis but does not provide information/PIA to participants; conducts formal PIA but the process is incomplete or incorrect.	Prepares for formal PIA by scheduling time/location for analysis, informing participants of time/location, and providing final copies of PIA to participants	Describes arrangements for meeting accommodations for participants by utilizing community business partnerships.	Describes the method to confirm invitation and confirmation of participants to the PIA to help assure the most participation.

		D	ate:	
Does not record the PIA in the department records system; does not plan to implement PIA recommendations.	Records PIA in the system incorrectly; only applies a third or less of the recommendations in the PIA.	Utilizes department records system to store completed PIA; ensures completed PIA is accessible to all incident participants; plans to implement PIA recommendations into future training.	Ensures PIA is accessible to local agencies not present at the incident but have the potential to be affected by the incident in some meaningful way; shares PIA recommendations with same agencies.	Uploads PIA to state/federal-level record server using departmental computer system; participate in state/federal trainings based on PIA recommendations.
Overall Score:		/20 PASS	No	Yes
aluator	Date	Candidate		Date
	Does not record the PIA in the department records system; does not plan to implement PIA recommendations.  Overall Score:	Does not record the PIA in the department records system; does not plan to implement PIA recommendations.  Records PIA in the system incorrectly; only applies a third or less of the recommendations in the PIA.	Does not record the PIA in the department records system; does not plan to implement PIA recommendations.  Records PIA in the system incorrectly; only applies a third or less of the recommendations in the PIA.  Records PIA in the system to store completed PIA; ensures completed PIA is accessible to all incident participants; plans to implement PIA recommendations into future training.  Overall Score:  /20 PASS	Does not record the PIA in the department records system incorrectly; only applies a third or less of the recommendations in the PIA.  Records PIA in the system incorrectly; only applies a third or less of the recommendations in the PIA.  Records PIA in the system incorrectly; only applies a third or less of the recommendations in the PIA.  Records PIA in the system to store completed PIA; ensures completed PIA is accessible to all incident participants; plans to implement PIA recommendations into future training.  Records PIA in the system to store completed PIA is accessible to all incident participants; plans to implement PIA recommendations into future training.  No  Overall Score:  /20 PASS No

Name	Date
Obiective	Analyze scenarios and make recommendations based on

member history. [NFPA® 1021, 5.4.5, 5.7.1]

# Directions

- 1. Read the scenario provided below.
- 2. Analyze the three accident reports that accompany the scenario. Using the blank memorandum form, prepare a memo to Battalion Chief McCardle outlining approaches that can be taken to improve safety in the department. Be sure to detail any specific recommendations for safety measures.

### Note:

The memo should address the type(s) of risks presented in the scenario and ways the department can improve brush pumper driver safety. The three pre-written vehicle accident reports can be used to support your recommendations.

### Resources

- Scenario
- Memorandum Form
- 3 Vehicle Accident Reports

### **Scenario**

You are a company officer of the Chestnut Grove Fire Department assigned to Fire Station 7, A shift. Fire Station 7 is located near a large housing development, over three square miles (7.8 km²) in size, and is situated in an wildland/interface environment. Anticipating an emerging threat posed by the possibility of brush and forest fire potential, the fire department stationed Brush Unit 7 in Fire Station 7.

David Dent is the senior firefighter on your shift and is the designated D/O for BU-7. He has been trained to operate fire department engines and aerial devices. Though national statistics indicate that brush units suffer the same accident rate as other fire apparatus, BU-7 has been involved in three accidents with only a small number emergency calls. Firefighter Dent has been the operator in all three accidents. No other accidents have been reported when other Driver/Operators are assigned to the vehicle. Though none have been resulted in an injury, you believe that additional investigation and analysis are needed. The vehicle accidents have occurred often enough that you have become very concerned and believe that a more serious event could happen.

During the time that BU-7 has been in service, it has responded to 317 emergency calls. These calls by shift are:

- 102 A Shift
- 99 B Shift
- 116 C Shift

Of the 102 emergency calls that BU-7 has responded to during A Shift, Firefighter Dent has been on duty and assigned to this vehicle for 95. Each of the other operators of BU-7 has as many responses in the unit as Dent.

D/O Dent is approximately 5'5" (2 m) in height, and wears glasses but his vision is corrected to 20/20. The other drivers assigned to BU-7 are each over six feet (2 m) tall.

BU-7 is a four-wheel drive vehicle on a standard pickup truck frame that has had a commercial fire body installed on the back. The cab is slightly higher than a normal pickup truck and due to the size of the fire body, oversized mirrors have been installed. These mirrors are of the type used on large trucks. The mirrors can be adjusted inward and outward, but will not move up or down.

### **Memorandum Form**

Chestnut Grove Fire Department 15401 Redline Avenue Chestnut Grove, USA

Memo	
Date:	
To:	
From:	
Subject:	

Skill Sheet 5

Delaware State Fire School, Fire Officer II	injury/Accident investigation

# CHESTNUT GROVE FIRE DEPARTMENT VEHICLE ACCIDENT REPORT 1

<b>Date:</b> 03/04/13	Vehicle Assigned Location and Address: Fire Station 7
Vehicle Designation: BU-7	15673 Hatfield Road
Name of Operator: D/O Dent	Vehicle Type: Brush Unit
Driver's License Number: 12345678	Shift: A
Incident Number: 05-067324	Fire Incident Type and Location: Wildland interface fire. Clear Wood Estates
Police Department Accident Report Number: 05-030434769	Development
Injuries: No injuries	

### **Accident Description Narrative:**

While responding to a reported field fire D/O David Dent struck a parked car as he tried to drive around a vehicle pulled to the side of the road. The front right side of BU-7 struck the left front quarter panel of the vehicle. D/O Dent was traveling about 35 miles per hour (56 k/h) at the time of the accident and was trying to make a right turn from Clearwater Springs Road onto Bennett Street. The vehicle that was struck by BU-7 was stopped at the intersection.

#### **Accident Cause Narrative:**

D/O Dent was operating the BU-7 at 35 mph (56 k/h) in a 20 mph (32 k/h) zone while responding to a reported wildland fire in the Clear Wood Estates housing development. While attempting to make a hard right turn around a parked vehicle at the intersection of Woodland Acres Drive and Aspen Place, he struck a stopped vehicle. The vehicle was impacted on the left side suffering extensive damage from the driver's door forward. BU-7 sustained damage to the right front quarter panel and passenger door. Additionally, the right front tire was flattened. D/O Dent stated that he was watching for traffic to his left and began to make the turn, misjudging the proximity of the other vehicle. D/O Dent claimed that when looked out the right side window, the mirror blocked his view of the vehicle to his right.

Supervisor/Manager:	Driver/Operator:
Your name	David Dent

# CHESTNUT GROVE FIRE DEPARTMENT VEHICLE ACCIDENT REPORT 2

Date: 10/23/12	Vehicle Assigned Location and Address: Fire Station 7
Vehicle Designation: BU-7	15673 Hatfield Road
Name of Operator: D/O David Dent	Vehicle Type: Brush Unit
Driver's License Number: 12345678	Shift: A
Incident Number: 07-080424	Fire Incident Type and Incident Location: Brush pile. Northwest quadrant of the Tall Red Oak
Police Department Accident Report Number: 06-1023156348	Estates subdivision – no roadway.
Injuries: No injuries.	

### **Accident Description Narrative:**

Following the extinguishment of a large brush fire, D/O Dent was returning to service when he struck a tree with BU-7. The tree was struck by the right side of the vehicle. The impact severely damaged the fire unit. The fire body, including all compartments on the right side, was crushed and the 200-gallon (800 L) water tank was ruptured. The fire pump was broken from its mountings. The right rear wheel well was displaced into the rear tires. D/O Dent stated that he had just begun to move the vehicle and was turning it around when the accident occurred. He also stated that he had checked his mirrors for objects but because of the location of the right side mirror he did not see the tree.

#### Accident Cause Narrative:

The accident occurred in an area that was being prepared for development and was covered with slash and debris from these operations. The area where the accident happened was relatively clear except for the oak tree that was struck by BU-7 and about 300 feet (90 m) from the location of the fire. D/O Dent stated that he had just begun to move the vehicle and was turning it around when the accident occurred. He also stated that he had checked his mirrors for objects but because of the location of the right side mirror he did not see the tree as he turned.

Supervisor/Manager:	Driver/Operator
Your Name	David Dent

# CHESTNUT GROVE FIRE DEPARTMENT VEHICLE ACCIDENT REPORT 3

Date: 11/14/11	Fire Station 7			
Vehicle Designation: Brush Unit 7	15673 Hatfield Road			
Name of Operator:	Vehicle Type: Brush Utility			
D/O David Dent	Tomolo Type: Brasil Gamey			
Driver's License Number:	Shift: A			
12345678				
Fire Incident Number:	Fire Incident Type and Location:			
04-038976  Police Department Accident Report Number:	Brush fire. Northwest section of Sweethomes  Development.			
04-111412540	Development.			
Injuries:				
No injuries.				
Accident Description Narrative:  While responding to a reported brush fire BU-7 struck a stop sign on the northeast corner of Carol Avenue and Hatfield Road as it was making a right turn. The stop sign was knocked over and run over by BU-7. The vehicle suffered damage, mostly scraped paint, to the right door and right side of the fire body. D/O Dent stopped the vehicle and checked it for damage, and finding it minor proceeded to the fire for fire suppression activities. Dent claimed that when he looked to the right, the mirror on the passenger side partially blocked his vision causing him to misjudge the proximity of the curb and sign.				
Accident Cause Narrative: The accident occurred while D/O Dent was attempting to make a right turn. The vehicle was turned too early and the rear of the vehicle went over the curb and struck the stop sign. Driver Dent stated that he was traveling at about 45 miles (72 k/h) per hour. The posted speed limit is 25 miles (40 k/h) per hour.				
Supervisor/Manager:	Driver/Operator:			
Your Name	David Dent			

Delaware State Fire School Fire Officer II Skill Sheet 5

Candidate:	Date:	
candidate.	Date.	

Fire Officer II – 1021	NFPA - 2020	Skill Sheet # 5
Injury/Accident Investigation and Report		Objective(s) 5.4.5, 5.7.1
Evaluator Instructions: The candidate shall review an incident in which a member was injured, identifying and review the		

findings and suggest any workplace training or work practice controls to implement in a written document.

Performance Outcome: The candidate shall be able to sufficiently summarize a work-related injury, the cause and work practice controls to avoid the injury from occurring again.

Required Equipment: Pen and paper, or a computer with word processing.						
Needs Improvement 1 - 2 - 3 Effective - 4 - 5 Exceeds Minimum Standards						
Gather Records to Determine Cause	Does not gather individual crew member's records from their personnel file to determine root cause for accident, injury or exposure.	Gathers individual crew member's records but cannot determine the root cause of an accident, injury, or exposure; does not analyze the records for trends or variances.	men the deter for	neers individual crew nber's records from ir personnel file to rmine root cause(s) accident, injury, or reposure; analyzes cords for trends or variances.	Documents any trends or variances.	Creates a document or memo reminding the department of rules and regulations regarding the incident.
Identify Actions Taken	Does not identify actions taken and any recommended solution.	Identifies some, but not all, actions taken and recommended solutions; actions taken are not based on root cause/trend analysis.	and solu	atifies actions taken any recommended ation based on root and trend analysis.	Evaluates the actions taken to determine if they were the most effective actions for the situation.	Schedules a follow-up with the crew member to see if he or she felt it was an effective solution, if possible.
Record Documents	Does not document the analysis in a written report or record the documentation in the department record system.	Documents and records analysis, but report is incomplete or incorrect.	Documents analysis in written report outlining problems, investigation processes, and one or more recommendation solutions; utilizes department record system to store documentation.		Ensures that documentation cannot be accessed by anyone else.	Updates rules/regulations related to the incident to help prevent future incidents, if necessary.
Comments:					<b>.</b>	
Circle One: Product or <i>Process</i>	Overall Score:		/15	PASS	No	Yes

Date

Candidate

Delaware	State	Fire	School

Evaluator

Date

**Objective** Develop a media release. [NFPA 1021, 5.4.4, 5.6.3]

Student Name:	Date:

### **Directions**

For this skill sheet, the Company Officer II candidate shall prepare a news release announcing their annual fire prevention open house. The news release shall not be more than 2 pages and include the following: who, what, why, where, when and how as well as at least one photograph.

#### **Scenario**

The department is holding it's annual fire prevention open house, the Chief has tasked you to develop a media release for the upcoming event.

The event will be held at Station 2 on West Sussex Street There will be demonstrations, giveaways, and light fare.

Guests from the several Chestnut Grove agencies, Medevac 20 from Burnville, and Fire Department recruitment information will also be available.

#### **Resources**

Scenario

Candidate:	Date:	
candidate.	Date.	

Fire Officer II – 1021	NFPA - 2020	Skill Sheet # 6
Develop a Press Release		Objective(s) 5.4.4, 5.6.3

Evaluator Instructions: The candidate shall develop and distribute a media release by an appropriate format and distribution method depending on the desired audience.

Location: N/A

Performance Outcome: The candidate shall be able to sufficiently compose in an organized manner and format a media release for use with the department's social media or website, or release to a media outlet.

Required Equipment: Pen and paper, or a computer with word processing.

Required Equipment: Pen and paper, or a computer with word processing.							
	Needs Improvement 1 - 2 - 3 Effective - 4 - 5 Exceeds Minimum Standards						
Verify Materials	Does not verify that informational materials are not in breach of copyright law.	Verification of informational materials is incomplete or incorrect.	mater	ifies informational ials are not in breach f copyright law.	Creates a written statement identifying how the information is not in breach of copyright law.	Creates a list of the informational materials that are not in breach of copyright law for future use.	
Determine Media Format	Does not determine an ideal media format to reach desired target audience.	Determines a media format, but it is not the most idea for the desired target audience.	Determines ideal media format to reach desired target audience.		Identifies multiple media formats that can be used to reach the target audience.	Polls the target audience to see what media format is preferable to each one of them.	
Prepare Media Release	Does not prepare or distribute media release.	Media release is prepared, but not according to department/AHJ media template and protocol; distribution of informational material is incomplete or incorrect.	Prepares media release according to department/AHJ media template and protocol; distributes informational material through appropriate media outlet or department's social media platform.		Ensures that the media release is proofed and any errors corrected before being distributed.	Observes and documents general and target audience reaction to the media release for use in developing future media releases.	
Comments:							
Circle One: Product or <i>Process</i>	Overall Score:		/15	PASS	No	Yes	

Evaluator	Date	Candidate	Date

**Objective** Conduct a performance evaluation. [NFPA 1021, 5.2.2]

Student Name:	Date:

### **Directions**

Review the following scenario. Based on the information in the scenario, complete Form 100-1, Annual Performance Evaluation, for Driver/Operator John Smith. Assume you are the captain on the shift and Smith's direct supervisor. Add any pertinent comments in the comment section of the form. This may include recommendations on improving performance, recognizing excellent performance, training needed, etc. Use your signature and today's date on the signature line for the company officer.

### **Scenario**

You are the supervisor of Driver/Operator John Smith. Smith has worked for you for the past 2½ years. It is time for his annual performance appraisal. The performance period is January 1 through December 31 of last year.

Overall, Smith is a steady performer. He is not a 'shining star' but neither is he a sluggard. He is there when you need him and he is always willing to help when asked. On his last annual performance he received an average score of 2.33 (out of 3) overall.

Smith's one strong area is his driving and pumping ability. He is known as the best pump operator on the job. He takes time to try and teach younger firefighters how to do rule-of-thumb and set up the pump. During the 11 years he has been a driver he has never received a ticket, warning or any type of citation. He has never been involved in even a scratched fender. In preparing for the evaluation you review the following notes you have made during the previous year.

- In January and February Smith helped two firefighters prepare for the driver/operator promotional test. Both firefighters made the promotional list and have been promoted.
- On May 3 you had to discuss the condition of Smith's uniform. It was worn and dirty when he came to work.
- At a fire on June 16 Smith had to pump the engine and assist another driver with his truck also.

- The week of July 7 Smith volunteered to attend a two-day National Fire Academy course.
- On August 19 you had to discuss the condition of Smith's uniform. It was dirty.
- On November 22 Smith was late to work by 20 minutes. He did not call in to notify you that he was going to be late. He offered no explanation about his tardiness. He was counseled about being on time.
- On December 29 Smith reported to work with trousers that were torn and unserviceable. You had to send him home to change. Based on this information about Smith, complete Form 100-1 beginning on the next page.

#### Resources

- Scenario
- Form 100-1

### Form 100-1: Annual Performance Evaluation

Torm 100-1; Annuari	CITOTIII	ince Evaluation			
Employee Name:		Employee Rank:	Driver/Op	erator	
Evaluator Name:		Evaluator Rank:			
Date of Evaluation: Evaluation Per	iod:	to			
For each of the driver/operator job duties listed the employee's performance during the annual e provide written justification for the rating in the	evaluatio	n period. If a '1' i			
<ul> <li>3 = Exceptional performance - The employee duty.</li> <li>2 = Satisfactory perfomance - The employee duty.</li> <li>1 = Unsatisfactory perfomance - The employe job duty.</li> </ul>	meets su	pervisor's expect o meet supervisor	ations in th	is job	
Job Duty		Performanc	e Rating		
a. Station cleaning and maintenance	1	2	3	N/A	
b. Maintenance of apparatus	1	2	3	N/A	
<ul> <li>c. Compliance with orders, directives &amp; policies</li> </ul>	1	2	3	N/A	
d. Personal responsibility & initiative	1	2	3	N/A	
e. Pump & equipment operation	1	2	3	N/A	
f. Driving of apparatus	1	2	3	N/A	
g. Personal appearance	1	2	3	N/A	
h. Teamwork & cooperation	1	2	3	NA/	
Evaluator Comments					
Employee Signature:Evaluator Signature:					

Candidate:	Date:	
candidate.	Date.	

Fire Officer II – 1021	NFPA - 2020	Skill Sheet # 7
Performance Evaluation - In	mprovement	Objective(s) 5.2.1, 5.2.2

Evaluator Instructions: The candidate shall identify the performance problems with a member and develop a written document to provide corrective actions to meet goals of acceptable performance. The candidate will then create a written document summarizing for superiors of actions taken and expectations.

Location: N/A

Performance Outcome: The candidate shall be able to sufficiently define each position, with variations depending on local standard operating procedures.

Required Equipment: F	Pen and paper, or a compu					
	Needs In	nprovement 1 - 2	- 3 Ef	fective - 4 - 5 Exc	eeds Minimum St	andards
Schedule Performance Evaluation	Does not obtain approved AHJ evaluation requirements and job performance descriptions or pertinent individual crew member records; does not schedule meeting.	Obtains some, but not all, approved AHJ evaluation requirements and job performance descriptions and crew member records.	evalu and desc pertin mo sched	es approved AHJ nation requirements I job performance riptions, as well as nent individual crew ember records to dule a meeting with crew member.	Communicates with crew member to make sure there are no conflicts with the proposed date, and reschedules, if necessary.	Creates a list of the scheduled evaluation dates for each crew member and shares the list with the crew members.
Complete Job Performance Assessment	Does not schedule meeting with crew member or attempt a job performance assessment for the crew member.	Meets with crew member, but job performance evaluation assessment is incomplete or incorrect.	Completes job performance evaluation assessment by identifying strengths and weaknesses of crew member and developing SMART goals, and communicates results of job performance evaluation with crew member including how crew member is meeting JPRs and expected performance changes.		Displays tactful and fair behavior/attitude when discussing weaknesses and expected performance changes with the crew member.	Schedules a follow-up with the crew member to see if he or she is working on the expected performance changes.
Document and Store Results	Does not document or record results of evaluation and expected performance change.	Documents and records results of evaluation and expected performance change, but is incomplete or incorrect.	Documents results of evaluation as well as expected performance changes and utilizes department records system to store documentation.		Ensures performance evaluation is only accessible to those with proper authorization.	Shares the performance evaluation documentation with the crew member.
Comments:						
Circle One: Product or <i>Process</i>	Overall Score:		/15	PASS	No	Yes

Candidate

Date

**Evaluator** 

Date

This Page Intentionally Left Blank

### **National Certification Candidate Handbook**



1641 Chestnut Grove Road Dover, Delaware 19904 302-739-4773

Follow us on







Fire Officer 2 NFPA 1021-2020