

FELTON FIRE PROTECTION DISTRICT STANDARD OPERATING PROCEDURES

ARTICLE: III

SOP: 3201

SECTION: 3200

TRAINING

SUBJECT: INCIDENT REVIEW/TRAINING

PURPOSE: To provide Fire District Members with an opportunity to analyze incidents, review procedures used, identify ways to improve operations and training of personnel.

SCOPE: All Personnel

CRITIQUE POLICY

It is the policy of the Felton Fire Protection District to critique all major incidents. The function of the critique is to:

- *Analyze incident events, operations, and organizational structure so that needs for training, prevention activities, and changes in operational policy or resource allocation may be assessed.

- *Explore ways of fixing identified problems.

- *Provide all members of the fire department the benefit of the experience gained by those at the scene.

PROCEDURE

Incident critiques shall take place on three levels:

Engine Company: Unless a more in depth critique is requested, minor, routine incidents controlled by initial attack resources may be analyzed on an individual engine company basis. Findings from individual critiques deemed valuable to other department personnel will be forwarded to the Training Officer/Assistant Chief for review and distribution.

Multi-company/Single agency: The Fire Chief or his/her designate will organize a formal critique inviting all incident participants. Critique findings will be forwarded to the Training Officer/Asst. Chief for review and distribution.

Multi-agency: The Fire Chief or his/her designate will organize a formal critique and invite all responding agencies.

INTRODUCTION

A critique by definition is a review or commentary utilizing careful and exact evaluation and judgment. Incident critiques are conducted as the final evaluation of the events and operations which take place at a particular incident. Situations and activities will be described, conclusions will be drawn, and recommendations will be made which will be of benefit to all.

During the critique process, it is important to focus upon the impact of the act, not the individual or crew who took the action. The critique is intended to be a learning and problem solving experience, not a finger pointing exercise.

GOAL:

To improve the effectiveness of Department policies and operations by conducting analyses of emergency incidents according to procedural guidelines.

If possible, critiques should be presided over by someone who was not directly involved in the incident being reviewed. This will help improve objectivity.

Prior to Starting:

1. Diagram the incident organizational chart.
2. Make all necessary drawings and diagrams. Include weather conditions (wind, temp, etc.), compass points, locations of victims, resources, roads, hazards, and any other pertinent information.

Make drawings on medium which allows for changes as the critique progresses ("dry-erase" board, blackboard, etc.)

Formal critiques may require a series of permanent, graphics-quality drawings which can be displayed in series.

For structure fires include a drawing of the floor plan.

Be sure to make all charts and drawings large enough for everyone to see.

Materials Needed:

1. Well lighted quiet room with seating for all participants.
2. "Dry-erase" board with multi-colored markers, or a blackboard with chalk and eraser.
3. Documentation of resource dispatch, arrival, and message times.
4. Incident photos or video tapes if available (include appropriate audio-visual hardware).
5. A non-interested party to conduct the critique if available.
6. Appropriate Questionnaire for the Critique.

EMS/RESCUE CRITIQUE GUIDE

INSTRUCTIONS: The following questions are intended to be used as guidelines for analyzing EMS/Rescue incidents. Use whatever portions of the questionnaire applicable to the incident being considered and add to them if you like. Be sure to record findings that may be of interest to the fire department; especially if they have the potential to impact training or department policy. Forward this information to the Training Officer/Asst. Chief.

DISPATCH

1. What was said by NetCom on the initial dispatch?
2. Was the location given correctly? If not, what steps were taken to find the incident? Did the first unit on scene relay the correct location information to NetCom?
3. Did NetCom have the current and correct response information? (Does the response information for this hazard/location require an update)?
4. Were the closest, and most appropriate units dispatched?

RESPONSE

1. What resources (equipment and personnel) were included in the initial dispatch?
2. How long did the response take for each resource.
3. Were the proper response routes utilized?

SIZE-UP/REPORT ON CONDITIONS

1. What was considered in the initial size-up? (facts, probabilities, own situation, decisions, plan)
2. What was the initial report on conditions? Was it given by the first unit on scene? How long after arrival?
 - a. object
 - b. condition
 - c. action

d. assignment

e. resources

3. Were additional resources needed in addition to those provided by the initial dispatch?

4. Was the need for additional resources determined during the initial size-up? Were they ordered at that time?

INCIDENT COMMAND

1. Was incident command established by the first arriving unit?

2. Was the incident commander able to divorce him/herself away from operations enough to adequately command the incident?

3. Was an adequate, safe command post established?

4. Was command transferred? How was this accomplished?

5. Was joint command with another agency established? Should it have been? With what agency(s)?

6. Were any other ICS functions created (e.g. operations, liaison, extrication group, etc.)? Did they help facilitate command? In what ways? If they weren't established, should they have been? Why?

OPERATIONS

1. Was triage necessary? How was it accomplished? Who was in charge?

2. Number of patients:

a. How many priority A?

b. How many priority B?

c. How many priority C?

d. How many priority D?

Were triage tags utilized?

3. Were patient primary and secondary assessments completed prior to ALS arrival? Had all patients been assessed? How was the patient information transferred to ALS personnel?

4. What level of patient stabilization had been completed prior to ALS arrival? Were all patients receiving treatment? If not, had additional resources been ordered?

RESCUE

1. Describe any rescue problems encountered.

2. If rescue was necessary, what steps were taken to assure the safety of rescuers and victims? Was there a safety officer? Should one have been assigned?

3. Extrication (vehicle, building, trench, etc.)

a. If extrication was necessary, was it planned before implemented?

b. Was it accomplished according to patient priority?

c. Was there direct supervision and coordination of extrication operations (i.e. extrication division/ group)

d. What tools were used? Were they safely operated?

e. How long did it take to extricate all victims?

f. Was there adequate communication/coordination between all rescue personnel (including EMS)?

g. In retrospect, could anything have been done better? What would you do differently next time?

4. Over the Side Rescue

- a. Was one person in charge of the operation?
- b. Was there a safety officer?
- c. Was over the side rescue necessary or could the victim(s) have been walked/carried out?
- d. Were the proper tools and equipment used?
- e. Were all personnel trained in their specific function?
- f. Was there adequate coordination/communication between all rescue personnel (including EMS)?
- g. How long did it take to rescue all victims?
- h. In retrospect, what could have been done better?

LOGISTICS

1. Patient Transport
 - a. What form(s) of patient transport was/were used?
 - b. Was/were the transport mode(s) sufficient?
 - c. Was an ambulance staging area set up? Should there have been one?
 - d. Did the patient loading zone(s) allow for easy access/egress by ambulance(s)?
 - e. Was helicopter transport used? What criteria was used to determine the need for helicopter transport? Was a safe landing area designated? Were communications maintained between the ground and the helicopter?

COMMUNICATIONS

1. Did all communications with NetCom originate and terminate at a single point (I.E. incident commander or comm. unit)? In other words, did NetCom have to communicate with more than one person?

2. Was a tactical net used? Should you have used one?
3. Were the number and type of radio nets used adequate for your incident?
4. Were face to face communications used whenever possible?

PLANS

1. Was a plan developed and was everyone aware of their function?
2. How were resources tracked?
3. Was proper incident documentation completed (primarily Patient Care Reports)?

SAFETY

1. Was control of incident hazards and safety of all personnel the first priority?
 - a. Fire protection
 - b. Traffic control
 - c. Quick evaluation of hazardous area
2. Was proper safety equipment worn by all personnel?
 - a. Were turnouts worn? Should they have been?
 - b. Were appropriate infectious disease precautions taken by all personnel?

PUBLIC INFORMATION

1. Was all incident information disseminated from a single point to assure consistent, proper information?
2. Was a public information officer assigned? Should there have been one?

MISCELLANEOUS

Discuss any other areas pertinent to this incident.

LESSONS LEARNED/TRAINING NEEDS, POLICY DEFICIENCIES IDENTIFIED

List the lessons learned on this incident. Include thoughts on what type(s) of training or changes in policy might improve our capabilities in this area.

FIRE CRITIQUE GUIDE

INSTRUCTIONS: The following questions are intended to be used as guidelines for analyzing fire incidents. Use whatever portions of the questionnaire are applicable to the incident being considered and add to them if you like. Be sure to record findings that may be of interest to the fire department; especially if they have the potential to impact training or department policy. Forward this information to the Training Officer/Asst. Chief.

DISPATCH

1. What information did NETCOM receive from the reporting party?
2. What was said by NETCOM on the initial dispatch?
3. Was the location given correct? If not, what steps were taken to find the incident? Did the first unit on scene relay the correct location to NETCOM?
4. Did NETCOM have the current and correct response information? (Does the response information for this hazard/location require an update?)
5. Were the closest, most appropriate units dispatched?
6. Were you advised of any hazards (power lines, hazardous materials) on the initial dispatch?

RESPONSE

1. What resources (equipment and personnel) were included in the initial dispatch?
2. How long did the response take for each resource?
3. Were the proper response routes utilized?

SIZE-UP/REPORT ON CONDITIONS

1. What was considered in the initial size-up? (facts, probabilities, own situation, decisions, plan)

2. What was the initial report on conditions? Was it given by the first unit on scene? How long after arrival?

- a. object
- b. condition
- c. action
- d. assignment
- e. resources

3. Were additional resources needed in addition to those provided by the initial dispatch?

4. Was the need for additional resources determined during the initial size-up? Were they ordered at that time?

INCIDENT COMMAND

1. Was incident command established by the first arriving unit?

2. Was the incident commander able to divorce him/herself away from operations enough to adequately command the incident?

3. Was an adequate, safe command post established?

4. Was command transferred? How was this accomplished?

5. Was joint command with another agency established? Should it have been? With what agency(s)?

6. Were any other ICS functions created (e.g. operations, liaison, division/group, etc.)? Did they help facilitate command? In what ways? If they weren't established, should they have been? Why?

OPERATIONS: WILDLAND FIRE

1. Describe the fire upon your arrival.
 - a. Type of fire (brush, grass, timber, etc.)
 - b. Location of fire (roadway, bottom of canyon, ridge top, etc.)
 - c. What was the weather like? (wind, humidity, temperature, burning index)
 - d. Describe the topography in the fire area.
 - e. Estimate fire spread on your arrival.
 - Low: little or no spread
 - Moderate: spread less than one mile per hour
 - Dangerous: spread 1-3 miles per hour
 - Critical: spread greater than 3 miles per hour
 - f. Conditions (water supply, exposure, public involvement, etc.)
2. Describe the initial attack strategy
 - a. Direct attack
 - b. Indirect attack
 - c. Structure/exposure protection
3. What factors did you consider in deciding upon the initial strategy?
 - a. What were your initial objectives?
4. What tactics did you utilize to implement your strategy? How did you decide which tactics to use? Discuss each from the standpoint of efficiency, procedure, safety, support, and need for training.
 - a. Mobile attack (tandem, pincer, envelopment)
 - b. hose lay
 - c. Line construction (hand/dozer)

d. Air attack with ground crew backup (Was air attack used efficiently? Were they released promptly when no longer needed-both fixed wing and rotary wing?)

e. Firing operation

f. Other

5. What effect did your initial strategy have on the fire?

a. Sufficient for control of the fire.

b. Fire required additional resources (would a different initial strategy have prevented this?)

6. In retrospect, were the proper strategy and tactics used? If not, what would you have done differently?

7. Discuss mop-up procedures

a. Adequate water supply maintained?

b. Water conservation measures employed?

c. Resource/land damage minimized?

d. Any rekindles?

OPERATIONS: STRUCTURE FIRE

1. Describe the fire upon your arrival.

- a. Type of structure
- b. Level and floor(s) of involvement
- c. Exposures
- d. Hazards
- e. Conditions (rescue, potential, water supply, etc.)

2. Describe your initial actions

- a. Size-up
- b. Utilities (Taken care of promptly? PG&E requested?)

3. Strategy: discuss each of the following in detail with attention to needs for improvement

a. Rescue

1. When did the primary search take place?
2. How was it conducted? Was it coordinated with other operations?
How were searched area marked?
3. How many victims?
4. Was a secondary search completed? Was a new search crew used?
5. Did rescue crews (primary and secondary) have constant communications with operations/IC?

b. Exposures

1. What types of exposures were there? Was wildland considered?
2. Were exposures considered prior to attacking the main fire?
3. How were exposures protected (water curtain, line directly on exposure, extinguishment of main fire?)

4. Was information on exposure problems relayed to NETCOM?

c. Confinement

1. What was your initial confinement line placement? Interior attack from the unburned side? If attack was made from the exterior, what were your reasons?

2. Was it necessary to protect escape routes for victims/firefighters? Did you do that as your primary line placement?

3. If a second line was employed, what was it used for? Back up for the primary line?

4. What size line did you use for initial attack? Was it adequate? Was the water supply system able to support your line(s) without interruption?

5. Was there a sprinkler system? Did you support it?

d. Extinguishment

1. Was extinguishment accomplished with concern for minimizing water damage?

2. Direct or indirect attack?

3. If indirect attack was used, what were your reasons?

e. Overhaul

1. Were breathing apparatus worn by all exposed personnel during overhaul operations? If not, why not?

2. Was overhaul conducted with concern for both thoroughness and minimization of property damage?

3. How was safety maintained throughout the overhaul process?

f. Ventilation

1. When was ventilation first accomplished? Should it have been done sooner? Was vertical or horizontal ventilation used? If horizontal, why did you choose that over vertical?

2. Was breathing apparatus worn by the ventilating crew?

3. What tools were used? Were they adequate for the job?

4. What type of vertical technique was employed? Single large heat hole at highest point above the fire? Strip (trench) vent?

g. Salvage

1. When did salvage start? Should it have been started sooner?

2. Were salvage covers and hall runners used as soon as possible to minimize interior damage?

4. Public Relations

a. Was adequate communication between the fire department and the property owner/tenant maintained throughout the incident? Between the fire department and the public?

5. Was the building pre-planned? Should it have been? Was the pre-plan adequate for your needs? How could it be improved?

6. In retrospect, were the proper strategy and tactics used? What would you do differently next time?

OPERATIONS: OTHER FIRES (Vehicle, haz-mat, etc.)

1. Describe the fire upon arrival.

a. What was burning?

b. What were the exposures?

2. Fire Attack: Vehicle

a. Was extrication/rescue involved? If so, what did you do to protect occupants and firefighters from fire?

b. Did you attack the fire from a safe location (uphill/downwind) with a safe approach (crouched from the corners of the vehicle)?

c. Did you control any fuel spills?

d. What size line did you use (minimum of 1 1/2")?

e. Did all personnel wear breathing apparatus?

- f. Did you secure the vehicle to keep it from moving?
- g. How did you take care of traffic control?
- h. Were all hazards and hazardous materials detected and considered in formulating the attack strategy? What did you do to ensure the safety of firefighters and the public? Was attacking the fire the best and safest alternative?

3. Fire Attack: Haz-Mat

- a. See haz-mat critique section.

LOGISTICS

- 1. Describe the water supply system.
 - a. Hydrants? What type and how long of a hose lay was made?
 - b. If tenders were used, were there enough? How were they coordinated? How far did they have to travel and what did they use as a source? Was a portable tank used at the fire location?
 - c. Was a water supply officer assigned? Should there have been one?
- 2. Was feeding of crews necessary? How was it accomplished? Were needs recognized and ordered as soon as possible?
- 3. Was an air support (cascade) system utilized? How quickly did you realize it was needed and order it? If you didn't order it, should you have?

COMMUNICATIONS

- 1. Did all communications with NETCOM originate and terminate at a single point (i.e. incident commander or with comm. unit)? In other words, did NETCOM have to communicate with more than one person?
- 2. Was a tactical net used? Should you have used one?
- 3. Were the number and type of radio nets used adequate for your incident?
- 4. Were face to face communications used whenever possible?

PLANS

1. Was a plan developed and was everyone aware of their function?

2. How were resources tracked?

SAFETY

1. Was control of incident hazards and safety of all personnel first priority?
 - a. Did you mark power lines and other hazards with yellow/black tape?
 - b. Did you provide or order traffic control?
 - c. Did you promptly take care of utilities?
 - d. Were hazardous materials located and taken care of?
 1. Was "back-off and let burn" considered? Should it have been?
 - e. Were precautions taken to protect firefighters from building collapse?

2. Was proper safety equipment worn by all personnel?
 - a. Breathing apparatus worn for all structure operations?
 - b. Personal alarm locators turned on?
 - c. Full turnouts worn?
 - d. Wildland safety uniform worn during all wildland operations? (including fire shelter)

PUBLIC INFORMATION

1. Was all incident information disseminated from a single point to assure consistent, proper information?

2. Was a public information officer assigned? Should there have been one?

MISCELLANEOUS

Discuss any other areas pertinent to this incident.

LESSONS LEARNED/TRAINING NEEDS, POLICY DEFICIENCIES IDENTIFIED

List the lessons learned on this incident. Include thoughts on what type(s) of training or changes in policy might improve our capabilities in this area.

HAZARDOUS MATERIAL INCIDENT CRITIQUE GUIDE

INSTRUCTIONS: The following questions are intended to be used as guidelines for analyzing fire incidents. Use whatever portions of the questionnaire are applicable to the incident being considered and add to them if you like. Be sure to record findings that may be of interest to the fire department; especially if they have the potential to impact training or department policy. Forward this information to the Training Officer/Asst Chief.

DISPATCH

1. What information did NETCOM receive from the reporting party?
2. What was said by NETCOM on the initial dispatch?
3. Was the location given correct? If not, what steps were taken to find the incident? Did the first unit on scene relay the correct location to NETCOM?
4. Did NETCOM have the current and correct response information? (Does the response information for this hazard/location require an update?)
5. Were the closest, most appropriate units dispatched?
6. Were you advised of any hazards (power lines, hazardous materials) on the initial dispatch?

RESPONSE

1. What resources (equipment and personnel) were included in the initial dispatch?
2. How long did the response take for each resource?
3. Were the proper response routes utilized?

SIZE-UP/REPORT ON CONDITIONS

1. What was considered in the initial size-up? (facts, probabilities, own situation, decisions, plan)

2. What was the initial report on conditions? Was it given by the first unit on scene? How long after arrival?

- a. object
- b. condition
- c. action
- d. assignment
- e. resources

3. Were additional resources needed in addition to those provided by the initial dispatch?

4. Was the need for additional resources determined during the initial size-up? Were they ordered at that time?

INCIDENT COMMAND

1. Was incident command established by the first arriving unit?

2. Was the incident commander able to divorce him/herself away from operations enough to adequately command the incident?

3. Was an adequate, safe command post established?

4. Was command transferred? How was this accomplished?

5. Was joint command with another agency established? Should it have been? With what agency(s)?

6. Were any other ICS functions created (e.g. operations, liaison, division/group, etc.)? Did they help facilitate command? In what ways? If they weren't established, should they have been? Why?

OPERATIONS

1. Describe the situation on your arrival.
 - a. What was the product?

 - b. What were the conditions (spill, leak, fire, etc.)?

 - c. What type of containers were involved? What condition were they in?

 - d. Where was the incident located and what types of problems did the location pose?

2. Describe your approach to the incident. Did you identify the product before committing any resources?

3. What steps did you take to identify the product? What resources did you use? Did you get a product representative to respond or at least provide information?

4. Were the effects of wind, topography, location, and type of material considered in your size-up?

5. Was rescue necessary? Was the product identified prior to effecting rescue?

6. What were your initial actions?
 - a. Establish a command post in a safe area?

 - b. Identify product?

 - c. Order resources/other agencies (haz-mat team, environment health, fish and game, etc.)?

 - d. Establish zones, hot, warm, limited access, support, etc.?

 - e. Evacuation of affected areas?

 - f. Contact CHEMTREC? Did you have all the information they needed prior to calling?

7. Did you use a minimum of three resources in determining your course of action? Describe the recommended response.

- a. What did your references say about the material involved?
- b. What type of safety clothing was recommended?
- c. What were the recommended evacuation distances?
- d. What were the recommended control actions?

8. Did you have or did you get the resources you needed to implement the recommended course of action.

9. Describe your control operations.

- a. Doing nothing is sometimes the best alternative. Was it considered or implemented?

10. Describe your decontamination procedures.

- a. Were all victims decontaminated before transport?

11. Fire attack: Haz-mat

- a. Did you determine the presence of hazardous materials before action? What indicators did you use? How did the presence of hazardous materials influence your decisions? What resources did you use to assist you in your decisions?
- b. What action did you take?
- c. Did you consider nonintervention? What would have been the likely outcome with no direct action on the fire?
- d. What were your response objectives-what did you hope to accomplish? What were your alternatives?
- e. What alternatives for action did you consider? What did you choose?
- f. Was the option you chose the best one?
- g. Special Hazards

1. Explosives

- a. Did you evacuate the area? How was this accomplished?
- b. Did you attack the fire? Why?

2. Compressed Gasses

- a. What product was involved? How did the type of product influence your decisions?
- b. Was there flame impingement on the tank(s)? Above or below the product line?
- c. What action did you take? What was the outcome?
- d. What was the life and property hazard within the hazard area? Did you evacuate the area? How was this accomplished?
- e. How long had the fire been burning prior to your arrival?
- f. If you fought the fire, what was your water supply and how much were you able to flow? How long did it take to get water on the fire? Were you able to attack the point of flame impingement?
- g. What would have happened if you had evacuated and done nothing?

3. Pesticides/poisons

- a. When were you aware of the presence of poisons? Were you able to identify the product? How-what resources did you use? How did the presence of poisons influence your decisions?
 - b. What actions did you take?
 - c. Did you evacuate downwind?
 - d. If you fought the fire, was that the correct decision in retrospect? What would have been the outcome if you had let it burn?
- h. For all firefighting operations involving hazardous materials:
- 1. Did you treat runoff as you would any haz-mat spill (i.e. containment, and removal)?
 - 2. Did you provide for decontamination of all personnel, victims and equipment?

12. In retrospect, what could have been done better?

LOGISTICS

1. Water Supply

a. If a water supply was needed, what type of system was set up? Was a water supply officer assigned?

2. What type of special equipment or materials were needed (foam, diking materials, etc.)? Were there difficulties in acquiring needed supplies?

3. Was feeding of crews necessary? How was it accomplished? Were needs recognized and ordered as soon as possible?

4. Was air support (cascade) system utilized? How quickly did you realize it was needed and order it? If you didn't order it, should you have?

COMMUNICATIONS

1. Did all communications with NETCOM originate and terminate at a single point (i.e. incident commander or comm. unit)? In other words, did NETCOM have to communicate with more than one person?

2. Was a tactical net used? Should you have used one (or more)?

3. Were the number and type of radio nets used adequate for your incident?

4. Were face to face communications used whenever possible?

PLANS

1. Was a plan developed and was everyone aware of their function?

2. How were resources tracked?

SAFETY

1. Was control of incident hazards and safety of all personnel the first priority?

2. Was proper safety equipment worn by all personnel?

a. Breathing apparatus

b. Appropriate protective clothing for material involved

3. Was personnel contamination kept to an absolute minimum through proper scene control?

PUBLIC INFORMATION

1. Was all incident information disseminated from a single point to assure consistent, proper information?

2. Was a public information officer assigned? Should there have been one?

MISCELLANEOUS

Discuss any other areas pertinent to this incident.

LESSONS LEARNED/TRAINING NEEDS, POLICY DEFICIENCIES IDENTIFIED