TOPIC: RESOURCE TYPING STANDARDS

TIME FRAME: 1:00

LEVEL of INSTRUCTION: Level I

TERMINAL LEARNING OBJECTIVE: At the end of this topic, a student, given typing of resources with minimum staffing, will be able to identify the qualification requirements for ST/TF personnel, so that ST/TF are formed and designated with the all hazard incident command structure.

ENABLING LEARNING OBJECTIVES:
1. Determine the typing of Engine, Crew and Dozer Strike Teams
2. Describe minimum personnel staffing
3. Identify qualifications/requirements for ST/TF personnel
4. Describe how Strike Teams are formed and designated

MATERIALS NEEDED:
- Writing board with markers/erasers
- Appropriate audio visual equipment
- Appropriate audio visual material
- ICS 420-1 Field Operations Guide

REFERENCES:
- ICS 420-1 Field Operations Guide
- Incident Response Pocket Guide, National Wildfire Coordinating Group

PREPARATION:
It is important for the Strike Team/Task Force Leader to know the requirements and capabilities of personnel and equipment to accomplish tactical assignments. This knowledge is critical to making decisions about assignments and overall ST/TF capabilities.
I. ENABLING OBJECTIVES

A. Determine the typing of Engine, Crew and Dozer Strike Teams
B. Describe minimum personnel staffing
C. Identify special equipment for tactical assignments
D. Identify qualifications/requirements for ST/TF personnel
E. Describe how Strike Teams are formed and designated

II. ENGINE

A. The capability of an engine company and or Engine Strike Team is dependent on several things including
   1. Type
      a) FIRESCOPE Types 1, 2, 3, 4, 5, 6, 7
   2. Complement
   3. Configuration
   4. Training and Qualifications of Personnel

B. An Engine ST consists of five engines of the same type with common communications and a leader (in a separate vehicle)

C. Engine type will often determine the suitability for the assignment

1. Type 1, 2, or 3 Engines may be suitable for structure defense but narrow or rough roads may eliminate the ability to use the Type 1 or 2 Engines
2. Incident assignments requiring large volumes of water may require the use of Type 1 or 2 Engines, but would be beyond the pumping capabilities of a Type 3 Engine

D. Engine complement
   1. Types of engines have a minimum standard for hose complement, ladders, master streams, personnel and pump capacity

<table>
<thead>
<tr>
<th>PRESENTATION</th>
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<tbody>
<tr>
<td>2. Large Diameter Hose (LDH)</td>
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<tr>
<td>3. Master stream appliances</td>
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<td>4. Communications equipment (radios, cell phones, etc.)</td>
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<td>5. EMS Equipment</td>
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<td>6. Rescue Equipment (hydraulic, power, etc.)</td>
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<td>7. Ladder type and complement</td>
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<td>8. Salvage</td>
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<td>9. Thermal imaging equipment</td>
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<td>10. Ventilation equipment</td>
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<tr>
<td>11. SCBA (low or high pressure, quantity)</td>
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<td>12. Chainsaws</td>
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<tr>
<td>13. Portable pumps</td>
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<tr>
<td>14. Portable generators</td>
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<tr>
<td>15. Hand tools</td>
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<tr>
<td>16. Wildland hose complement and fittings (type and amount)</td>
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</tbody>
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What other types of equipment or variations beyond the minimum complement might change operational applications?
E. Capabilities

1. Pump type and capacity
   a) Main or midship and rated capacity
      1) Pressure or volume
         • Pumping a hose lay with elevation may require a pump capable of 450 psi
   b) Auxiliary or PTO
      1) Mobile attack capability
      2) Bump and run tactics

2. Tank capacity
   a) Water supply may require a large capacity at the pumping engine
   b) Structure defense – bigger tank is better, a Strike Team with large capacity tanks can sustain themselves longer without support
   c) Depending on access, a smaller and shorter wheel-base engine may be necessary; narrow steep driveways and roads may restrict use of larger engines

3. Foam
   a) Class A
   b) Class B
   c) Compressed air foam

4. Conventional or 4 wheel drive
5. Mechanical condition
   a) First line engine
   b) Reserve engine

6. Cab and crew compartment configuration
   a) Open cab or crew compartment
   b) Seating configuration

NOTE: Refer students to Student Information Sheet 2-2-1, Production Rates, in the Student Supplement

III. CREWS

A. A crew strike team consists of 26 persons plus a leader (27 total)
   1. The minimum 26 persons include crewmembers and supervisor
   2. The strike team leader should not have the responsibility for an individual crew within the strike team and should have a separate vehicle

B. Type 1 and Type 2 crews should not be mixed when forming Crew Strike Teams
   1. Restrictions
   2. Experience
   3. Training
   4. Supervision
   5. Communications
   6. Transportation

NOTE: Typically Type 1 Crews will have a higher production rate and experience level than Type 2 Crews

What is the difference between Type 1 and Type 2 crews?

Give examples of different categories of
C.  Hotshot
1. Highest level of training and experience
2. Not limited on type of assignment
3. May have specialty skills such as firing or falling
4. Can split into squads or teams
5. Well equipped for most assignments
6. Able to "spike" or "coyote" for long duration on assignments

NOTE: Refer students to definition of "spike" and "coyote" in Incident Response Pocket Guide

D.  Local Government Crews
1. High level of training and experience
2. Normally not limited on type of assignment
3. May have specialty skills such as firing or falling
4. Can split into squads or teams
5. Well equipped for most assignments
6. Able to spike or coyote for long duration on assignments

E.  Inmate Crews
1. Leader has high level of training
2. Inmates are regularly trained
3. Security considerations may influence operational deployment
4. May not split into squads
5. Will not normally have specialty training or qualifications

crews under a Type 1 Crew and how it might affect the operational use of that crew
6. Requires special considerations to spike or coyote

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F. Type 2 Crews
1. Moderate or minimum experience (college students)
2. Training level may be minimal
3. No assigned supervisor (permanent)
4. May not have their own transportation
5. Minimum equipment
   a) May need to be equipped at incident
   b) May need incident communication equipment
6. Little or no specialized equipment or training
7. Possible restrictions of hours, use, and security
8. Requires special attention on timekeeping, commissary, and contract provisions

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IV. DOZER

A. A Dozer Strike Team consists of 2 dozers of the same type (Type 1, 2, 3) with 2 operators each, 1 dozer tender and 1 Dozer Strike Team Leader in a separate vehicle

NOTE: The use of a Dozer Strike Team Leader Trainee should be considered due to the potential for dozers with 2 operators to operate on a continuing 24 hour basis on back-to-back days. The Dozer Strike Team
Leader needs relief to provide the supervision and logistical support for the strike team

### B. Type is dependent on the horsepower of the dozer

1. Capabilities/performance
   a) Capability is based on
      1) Horsepower
      2) Slope
      3) Fuel model
      4) Fire behavior
      5) Condition/age of equipment
      6) Level of operator experience
   b) Other conditions
      1) Temperature
      2) Soil moisture
      3) Rocky soil
      4) Day/night
      5) Direct vs. indirect

2. All dozers can work in all fuel types, the difference is the rate of production

**NOTE:** Dozer horsepower ratings for dozer models and general fireline production rates are listed in the FOG Manual ICS 420-1

### C. Limitations

1. Limitations can be relative to capabilities previously mentioned
   a) For example, slope greater than 70%, dense fuels or inexperienced operators can be limiting factors

2. Areas restricted to mechanized equipment

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**APPLICATION**

What determines type (1, 2, or 3) for dozers?
a) National Parks/Monuments  
b) Riparian areas  
c) Archeological sites, etc.  
d) Underground utility hazards

D. Agency dozers  
1. Agency examples  
   a) Forest agencies (USFS, Cal Fire, BLM)  
   b) Contract counties (LA, Ventura, Kern)  
   c) Local government (LA City, Alameda Co.)  
2. Level of training  
   a) Will have formal training in  
      1) Fire behavior  
      2) Communications systems  
      3) ICS

E. Private hire dozers

1. Operators on hired dozers may not be familiar with chain-of-command or agency policies  
2. It may be necessary to inspect the PPE of the dozer operator to ensure compliance with agency requirements  
3. Radios on hired equipment must be inspected to ensure compatibility  
4. The dozer needs to be inspected to determine condition and that is suited for the assignment. (Type, mechanical condition)  
5. Verify contract for dozer and/or transport
NOTE: With hired equipment, the transport hauling the equipment may be a separate vendor requiring additional time keeping and contracts

6. The Dozer Strike Team Leader will be responsible for the time keeping on the hired equipment

7. Hired equipment requires direct and constant supervision by the Strike Team Leader

8. Provide the direction on tactics, safety, and expectations on the assignment
   a) Hired equipment operators may have only basic safety training

9. An evaluation on the performance of hired equipment is required by most agencies

NOTE: Refer students to Student Information Sheet 2-2-2, Contract/Vendor Performance Evaluation, in the Student Supplement

F. Dozer safety

1. Do not get immediately in front of or behind equipment in operation
   a) Operator has poor visibility out of cab

2. If you need to talk to the operator
   a) Use radio if possible
   b) Do not climb on dozer

3. Use hand signals for direction and safety

4. Avoid working directly below a dozer in operation
   a) Rolling rocks, etc.

5. Maintain communication with your dozers
   a) Watch out for dozers working in advance of the fire
      1) Operators may have poor visibility
b) Operators commonly miss radio communications due to excessive noise
   1) Always follow up
   2) Face to face if necessary

V. TRAINING AND QUALIFICATIONS OF PERSONNEL

A. Kinds / types of training and qualifications
   1. EMS training (paramedic, etc.)
   2. ICS/CICCS qualifications

B. Assignments requiring specialty training not provided by the department or agency
   1. I-Zone training
   2. Timber falling operations
   3. Firing operations
   4. Confined space rescue training
   5. Low Angle Rescue
   6. Urban Search and Rescue (USAR)
   7. Swift water rescue
   8. HazMat qualifications
   9. High rise incident qualifications
  10. Multi-casualty operational training
  11. Mechanic

What kinds of training, qualifications, or certifications would you be interested in identifying in your Strike Team or Task Force?

What types of assignments require specialty training?
C. Agency or department regulations or policies may restrict the use of their resources
   1. Off road use
   2. Travel time
   3. Night time chainsaw use

VI. FORMING AND DESIGNATING STRIKE TEAMS AND TASK FORCES

A. Strike Teams or Task Forces can be formed and designated in the following ways
   1. By a single agency (agency owned resources)
      a) The agency three letter designator will precede agency's block number
         1) LFD 1001-A = LA City Fire Dept.
   2. Mixed agency
      a) Local resources formed by the Operational Area (Op Area) will be designated with respective Op Area three letter identification and block number
         1) XLA 1075-A = Los Angeles, Area A

B. All numbers include four (4) digits followed by a single letter (i.e., 1234-A)

C. Numbers and letter (1234-A) indicate
   1. (1) Mutual aid region
   2. (2) Agency or Op Area
   3. (3) & (4) Individual group numbers
   4. (A) Kind and type resources

What types of restrictions could impact the tactical deployment of an Engine Strike Team?
D. Any series of numbers within a region block becomes synonymous with the area or department to which it is assigned

1. Example
   a) USFS = 6 (ANF 1600)
   b) BLM, FWS, BIA, NPS = 7 (BBD 5700)
   c) OES = 8 (OES 3800)

**NOTE:** OES and local resources will not be mixed on Strike Teams outside the Op Area.

E. CAL FIRE will utilize 9100, 9200, 9300, 9400, and 9500 for unit designation
   1. 9000 and 9600 through 9900 blocks are not allocated at this time
   2. This designator reflects
      a) CDF 9111-C
         1) Agency
         2) CDF
         3) CDF Unit (old regions)
         4) Grouped resource number
         5) Kind and type

**NOTE:** For further information, refer to the FIRESCOPE MACS Resource Designation System 410-2 document.
SUMMARY:

The typing of resources is a component of the Incident Command System. When the order is placed, it is based on the need for that specific resource. Making certain each resource in a Strike Team/Task Force meets all the requirements for typing is critical to accomplish tactical assignments. Knowing all at the capabilities of your team enables you to make decisions regarding assignments and tactical planning.

EVALUATION:

The student will complete a written quiz at a time determined by the instructor.

ASSIGNMENT:

Review your notes and read the appropriate section(s) of the Student Supplement in preparation for the upcoming quiz. Study for the next session.