

WP&C Aspects of Recent Events (Last 13 months)

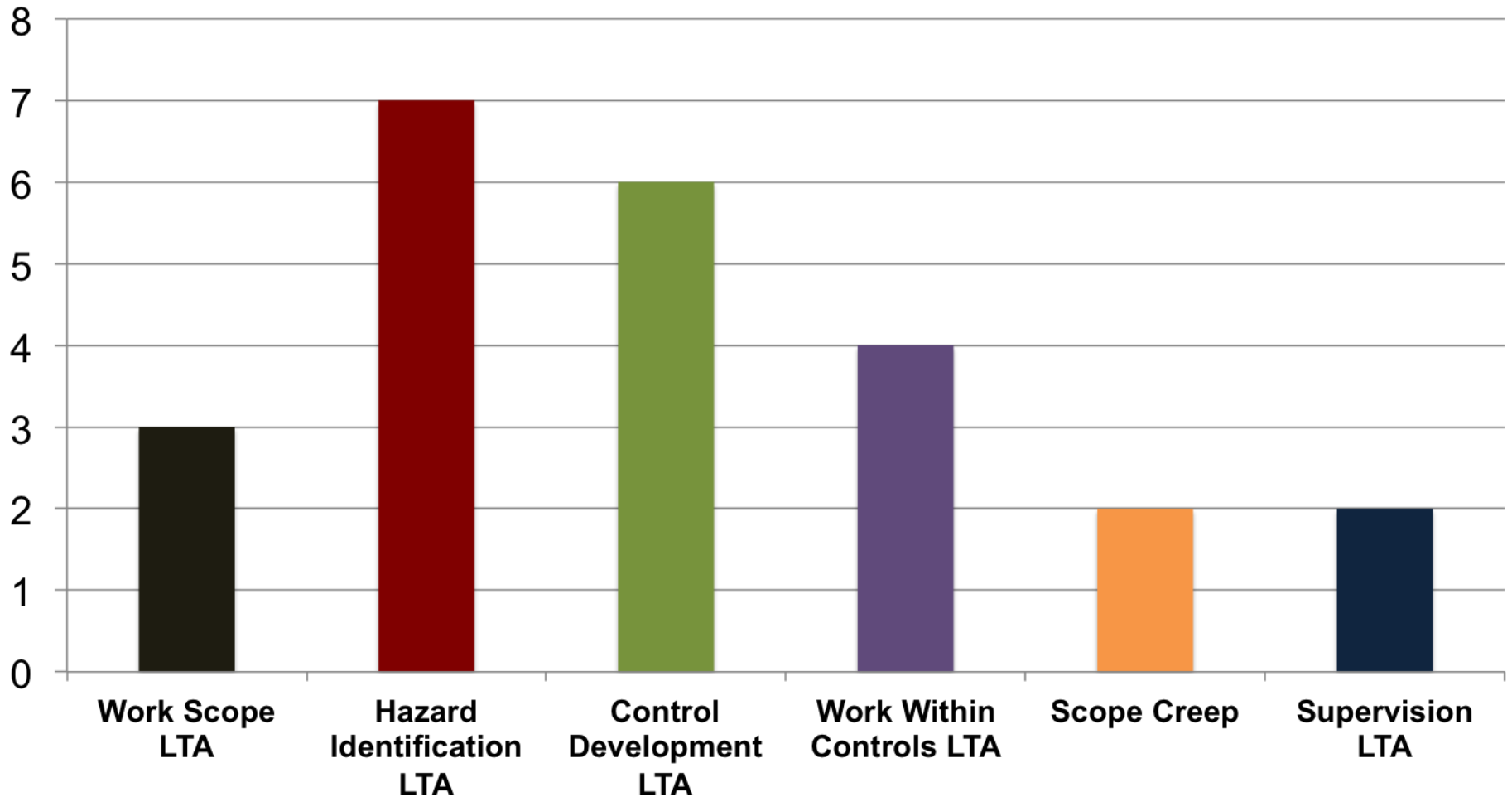
Date	Event	Scope of Work LTA	Hazard Recog. LTA	Development of Controls LTA	Scope Creep	Working within Controls LTA	Supervision LTA
8/1/12	Student - Glass Flange	X	X	X			X
8/16/12	Sub - TEDF 480V Line Cut				X	X	
8/29/12	Employee – Shoveling, injured back			X			X
9/18/12	Sub – LTT violation, HVAC fan belt					X	
10/24/12	Employee - Working under Solenoid - Back		X	X			
11/27/12	Subcontractor – Lifted trench cover - fracture					X	
2/12/13	Employee - Chuck Lathe Near Miss					X	
2/23/13	Matrixed employee – Pre-existing medical		X	X			

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Date	Event	Scope of Work LTA	Hazard Recog. LTA	Develop. of Controls LTA	Scope Creep	Working within Controls LTA	Supervision LTA
3/8/13	Sub - AHU#8		X	X	X	X	
5/7/13	Employee - wrist pain after extensive torque wrench use		X	X			
5/8/13	Employee – arm pain as a result of cable cutting		X	X			
7/2/13	Sub -TL Silica Exposure			X			
7/10/13	Employee - LTT	X				X	X
7/24/13	Student - Shock	X	X		X		X
8/15/13	Matrixed Employee - LCW Elbow Injury	X	X				

Work Planning & Control Aspects Associated with FY13 Events

FY13 Events (11 events)



Physics Division Work Planning Guidance

The following is Physics Division guidance related to work planning, control and authorization for work projects and test set ups in division areas across the laboratory.

- Any small setup or task with total duration of at most two weeks only requires an informal task hazard analysis. Informal means we can do this without formal documentation. If such an informal task hazard analysis results in a (pre-mitigated) risk code of 1, it can be skill of the craft, and no further documentation is needed. See points 2 and 3 below.
- If such an informal task hazard analysis results in a risk code of 2, at the very least an appropriate JLab Task List is required (halist, hblast, hclist, hdlst), and one should consider a formal work control document. See points 2-5 below.
- Any setup or task that has a total duration of more than two weeks requires at the very least an appropriate JLab Task List (halist, hblast, hclist, hdlst). A paper copy of the documentation must be available at the work place.
- Any task that has a risk code of 3 or larger requires written work control documentation, regardless of the length of the task. See point 4 below. A paper copy of the work control documentation must be available at the work place.

Further useful information or steps to consider:

1. Review JLab EH&S Manual Chapter Appendix 3210 T1.
The guidance provides the expectations and how we implement Integrated Safety Management System into planning and execution of work.
<https://www.jlab.org/ehs/ehsmanual/3210T1.htm>

1. Identification of work hazards and understanding their risks is an essential part of Jefferson Lab's work process. For an informal determination of the risk code associated with your work, see <http://www.jlab.org/ehs/ehsmanual/3210T3.htm>. If you are unsure, complete a written Task Hazard Analysis (THA) Worksheet for the work being planned: <https://www.jlab.org/ehs/ehsmanual/3210T1.htm>, and links therein. By utilizing the THA Worksheet effective analysis and controls can be made and developed.

1. Consider review of the Work Planning, Control and Authorization Flow Diagram: <https://www.jlab.org/listsites/WPCFlowChart.pdf> (Appendix 3210 T1 Section 1)
 - Defining the Scope of Work
 - Analyze the Hazards
 - Development and Implementation of Hazard Controls
 - Performing Work within Controls
 - Feedback and Continuous Improvement

4. Some tasks based on analyzed risk code will require work control documentation such as: (Appendix 3210 T1 Section 4)
 - Temporary Operational Safety Procedure (TOSP)
 - Operational Safety Procedure (OSP)
 - Laser Operational Safety Procedure (LOSP).

5. An appropriate JLab Task List is required for all work test set ups with duration longer than two weeks or risk code larger than 1. (Appendix 3210 T1 Section 4)
<http://www.jlab.org/listsites/>

6. When in doubt as to if a work test set up documentation is required, please feel free to contact the Division Safety Officer.

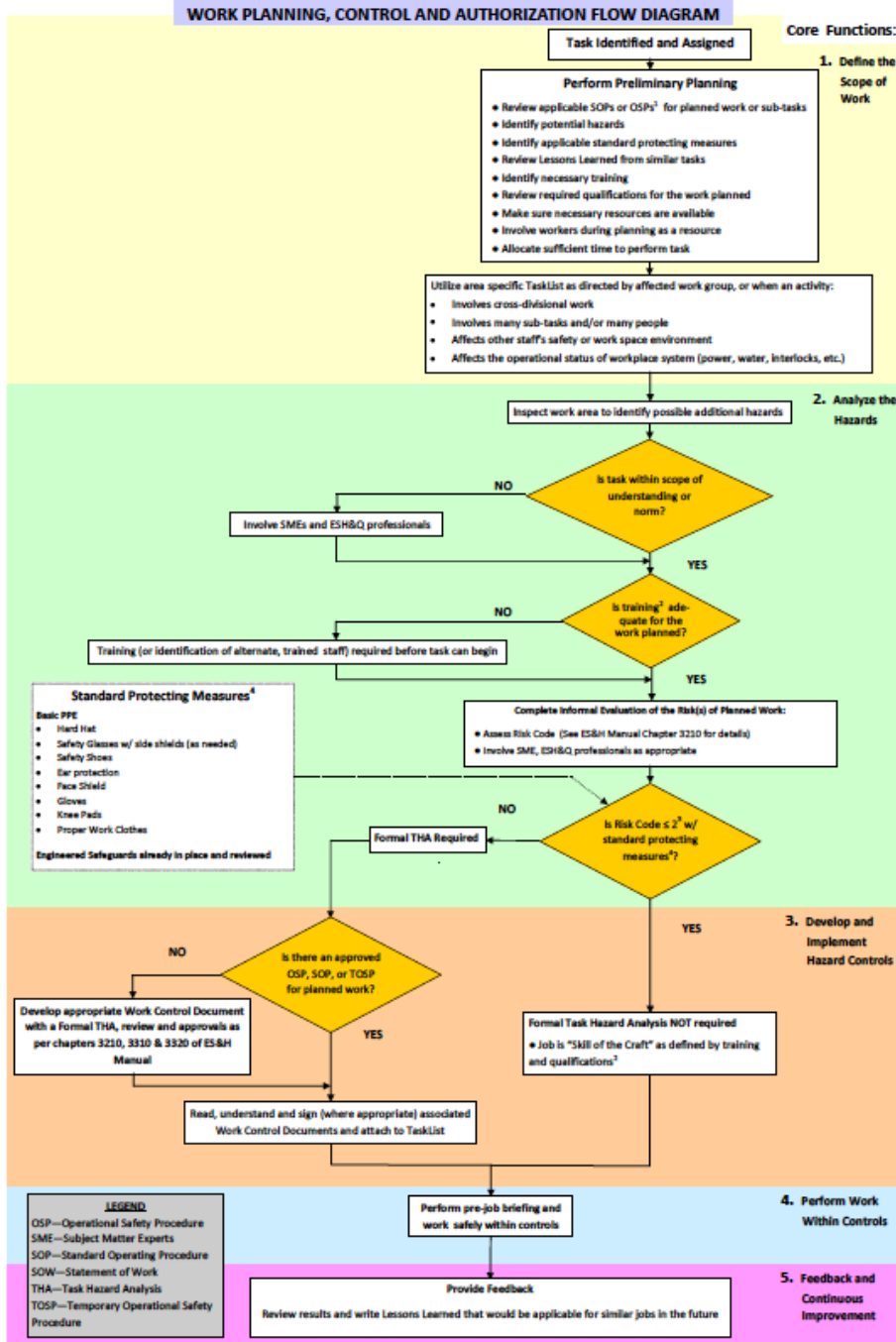
7. Any related questions can be directed to the Division Safety Officer, the Physics Division EH&S Liaison, or the Division EH&S Coordinator.

Slides hereafter is what was used for a meeting in the Engineering Division related to work planning and controls.

- Work Planning and Controls Flow Chart
- Matrix Employee - Supervisor Checklist

WORK PLANNING, CONTROL AND AUTHORIZATION FLOW DIAGRAM

<http://wwwold.jlab.org/listsites/WPCFlowChart.pdf>



1- OSPs and SOPs must be approved and current to be considered valid
 2- Training = Equipment Specific, Area Specific or Functional or Technical Competencies
 3- When RC ≥ 2 , worker and supervisor will meet to discuss associated hazards before task can begin
 4- As per Chapter 3210 of ESH Manual

WORK PLANNING, CONTROL AND AUTHORIZATION FLOW DIAGRAM

Core Functions:

1. Define the Scope of Work

Task Identified and Assigned

Perform Preliminary Planning

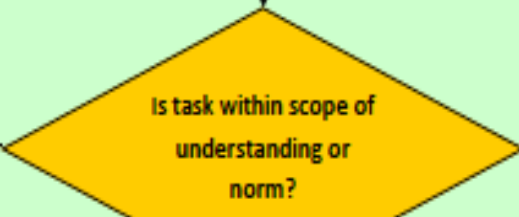
- Review applicable SOPs or OSPs¹ for planned work or sub-tasks
- Identify potential hazards
- Identify applicable standard protecting measures
- Review Lessons Learned from similar tasks
- Identify necessary training
- Review required qualifications for the work planned
- Make sure necessary resources are available
- Involve workers during planning as a resource
- Allocate sufficient time to perform task

Utilize area specific TaskList as directed by affected work group, or when an activity:

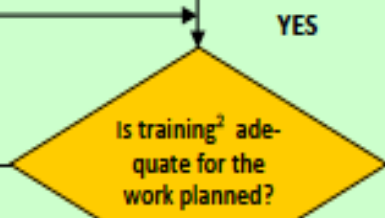
- Involves cross-divisional work
- Involves many sub-tasks and/or many people
- Affects other staff's safety or work space environment
- Affects the operational status of workplace system (power, water, interlocks, etc.)

2. Analyze the Hazards

Inspect work area to identify possible additional hazards



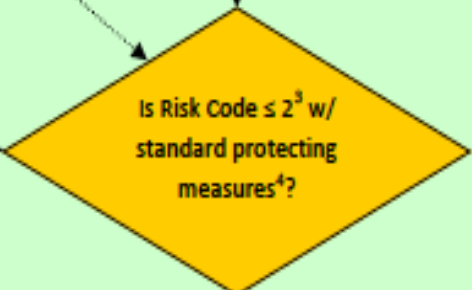
Involve SMEs and ESH&Q professionals



Training (or identification of alternate, trained staff) required before task can begin

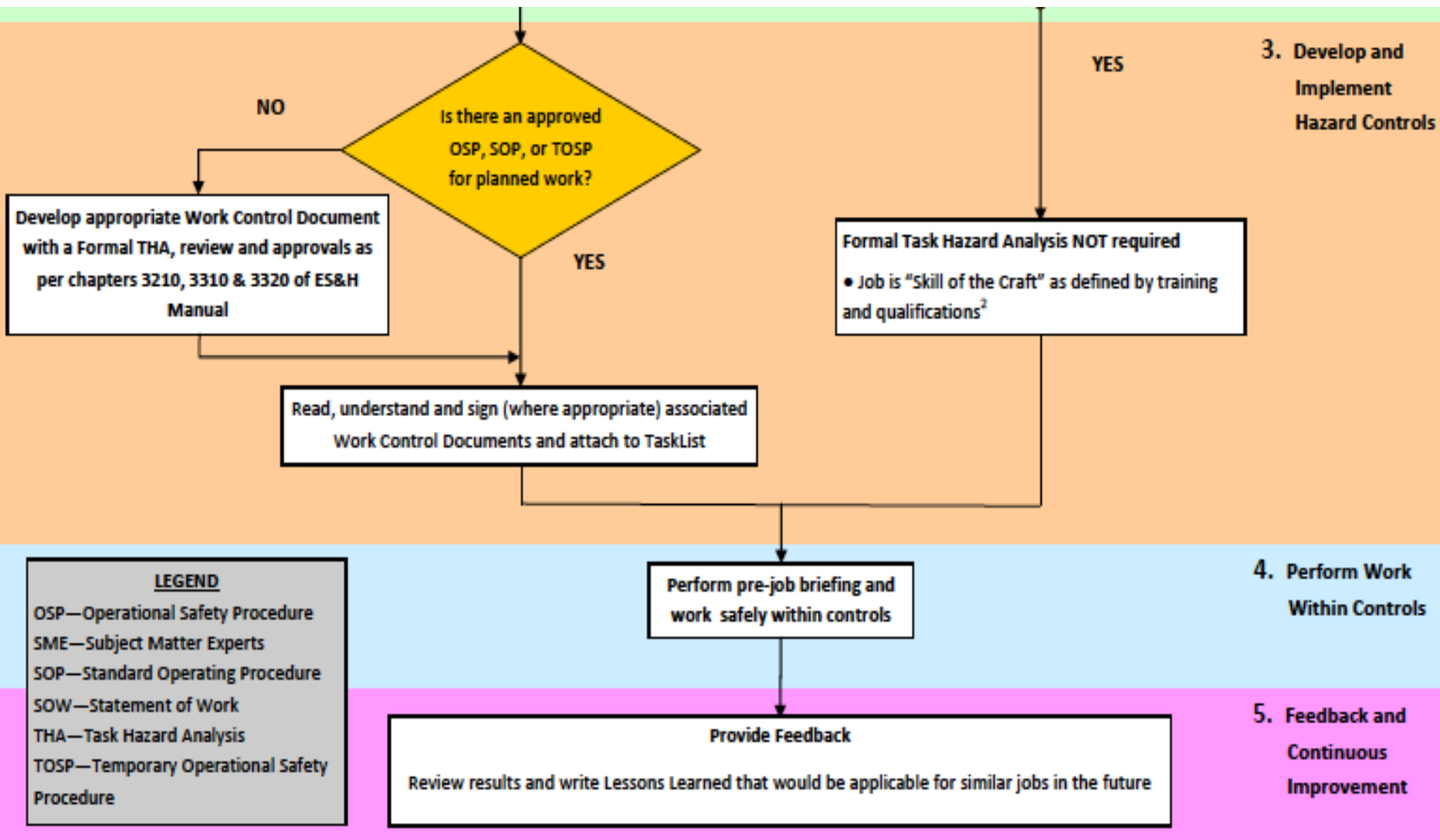
Complete Informal Evaluation of the Risk(s) of Planned Work:

- Assess Risk Code (See ES&H Manual Chapter 3210 for details)
- Involve SME, ESH&Q professionals as appropriate



Formal THA Required

- Standard Protecting Measures⁴**
- Basic PPE
- Hard Hat
 - Safety Glasses w/ side shields (as needed)
 - Safety Shoes
 - Ear protection
 - Face Shield
 - Gloves
 - Knee Pads
 - Proper Work Clothes
- Engineered Safeguards already in place and reviewed



3. Develop and Implement Hazard Controls

4. Perform Work Within Controls

5. Feedback and Continuous Improvement

LEGEND
 OSP—Operational Safety Procedure
 SME—Subject Matter Experts
 SOP—Standard Operating Procedure
 SOW—Statement of Work
 THA—Task Hazard Analysis
 TOSP—Temporary Operational Safety Procedure

- 1- OSPs and SOPs must be approved and current to be considered valid
- 2- Training = Equipment Specific, Area Specific or Functional or Technical Competencies
- 3- When RC =2, worker and supervisor will meet to discuss associated hazards before task can begin
- 4- As per Chapter 3210 of ES&H Manual

Matrix Employee – Supervisor Checklist

- Review/Revise JTA and update training **coordinating with the Home Supervisor to be sure requirements are updated.**
- Provide job and equipment specific training, operating procedures and PPE.
 - Develop a list of what will be needed & formally check the list off as the training is completed to indicate qualification for that assignment.
 - Include any written equipment specific procedures.
- Assign an experienced partner/mentor
- Just like new employees, introduction of matrix staff will impact production until they come up to speed. **Safety is a higher priority than schedule.**
- Discussion topics with matrixed staff:
 - Reinforce stop work authority
 - Identify where to go for help – ask Team and Safety Liaison to keep an eye out
 - Workplace ergonomic issues to consider
- Items to consider when assigning work to matrixed staff:
 - Level of supervisor attention required
 - No more than 50% matrix staff assigned to a task/work team
 - Clearly define roles and responsibilities of the matrixed employee
 - Housekeeping requirements
- Walk down of work site for identification of hazards and preventative measures with entire crew is even more important than usual.