

Task Book

for the Position of

Mine Rescue Technician 1

Mine & Tunnel

MRT1



Colorado Front Range Mine Rescue - CFRMR
Rescue Station Location at The Edgar Mine
365 8th Avenue, Idaho Springs, Colorado 80452

Mailing Address:
Post Office Box 475
Idaho Springs, Colorado 80452

Version Issue Date: Revision 3 , April 2023

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Rev. #	Date	Comment
0	Dec 2018	Initial Issue
1	Aug 4 2019	Logo Changed to version with Flame Reflection in Apparatus Mask
2	Jan 13 2020	Removed 'Non-Coal' from Document Title
3	Apr 08 2023	Removed requirement for psychological stress awareness training.



Mine Rescue Technician 1 - Mine & Tunnel (MRT1)

Position Task Book Assigned to

Trainee's Name
Duty Station
Phone Number
E-Mail

Was initiated by

Official's Name
Title
Duty Station
Phone Number
E-Mail

Was initiated at

Location
Date

The qualification and training of; Mine Rescue Technicians, Mine Rescue Stations and Mine Rescue Teams, are defined by federal regulations issued by The Mine Safety Health Administration (MSHA). The MRT2 task book is intended to document the existing Mine Rescue Team Member MSHA training requirements into a National Incident Management System (NIMS) compliant format for the position of Mine Rescue Technician 2 (MRT2). This MRT1 task book builds upon MRT2 requirements by including additional training in: First Aid , Rope Rescue and The Incident Command System. Task books for Strike Team Leader Mine Rescue (STLMR) and Task Force Leader Mine Rescue (TFLMR) are also under development. Successfully completing the MSHA CFR Part 49.7 Physical Exam, and acceptance as a trainee on a Mine Rescue Team is required to initiate this task book.

An individual who serves in an MRT1 capacity must also maintain currency with all MSHA CFR Part 49 requirements, including but not limited to: Initial safety training and annual refresher required of all miners, work in an underground mine for at least one of the last 5 years, Initial 20-hour Oxygen Breather Training, Complete MSHA Mine Rescue Training curriculum, maintain minimum of 96 training hours per year, attend at least two MSHA defined Mine Emergency Response Development (MERD) exercises a year and maintain training time wearing oxygen rebreather.



Colorado Front Range Mine Rescue, Inc. is a non-profit (501(c)3) volunteer based organization, unique in its services provided and its membership. Meeting the requirements of 30CFR Part 49, Colorado Front Range Mine Rescue, Inc. ("CFRMR") provides rescue team availability for small mines and mine-related projects in the western United States of America. The team is composed of volunteers who meet at least once per month to train and maintain a full mine rescue station, with at least one (1) team of six (6) Mine Rescue Personnel that meets the rigorous standards specified in the Code of Federal Regulations (30CFR§49) administered by the Mine Safety and Health Administration ("MSHA")

This Position Task Book (PTB) was developed and is owned and maintained by the Colorado Front Range Mine Rescue Team (CFRMR) as one of the components of training and availability as a Mine Rescue Team . Any comments, corrections, or suggestions to this PTB should be emailed to: Greg Black, Liaison Officer of CFRMR GregBlack@GoldenEagleTechnologies.Com ,

Mine Rescue Technician 1 - Mine & Tunnel (MRT1)

Trainee Name:
<i>FINAL EVALUATOR'S VERIFICATION:</i>
<i>Evaluator; DO NOT complete this unless you are recommending the trainee for certification.</i>
I verify all tasks have been performed and are documented with appropriate initials.
I also verify the trainee should be considered for certification in this position.
Evaluator's Signature
Date
Evaluator's Printed Name
Title
Duty Station
Phone Number
E-Mail

TRAINEE RECORD OF PRE-RESQUISITE REQUIRMENTS

Trainee to complete immediately before submittal to Final Evaluator:

Trainee Name:	
Currency as of todays date (Date Month Year)	
Time under Oxygen current. 2 Hours every other month (signature)	
Annual Safety Refresher (Month/Year of last refresher)	
Date of last annual MSHA fitness determination by Physician (Month/Year)	

CERTIFYING OFFICIAL

Trainee Name:
Has met all requirements for qualification in this position is certified for the position.
Official's Signature:
Date
Official's Printed Name
Title
Duty Station
Phone Number
Email

NATIONAL INCIDENT MANAGEMENT SYSTEM (NIMS)

INCIDENT COMMAND SYSTEM (ICS) POSITION TASK BOOKS (PTBs)

Position Task Books (PTBs) are designed to be used by any individual (trainee) interested in becoming certified under the National Incident Management System (NIMS). The PTB's are intended to be used to document experiences that indicate successful completion of tasks specific to an Incident Command System (ICS) position. The performance requirements for each position are associated with core ICS competencies, behaviors and tasks as suggested to the Federal Emergency Management Agency (FEMA) by a multi-disciplined, highly experienced expert panel.

Trainees are evaluated during this process by qualified evaluators, and the trainee's performance is documented in the PTB for each task by the evaluator's initials and date of completion. An Evaluation Record will be completed by all evaluators documenting the trainee's progress after each evaluation opportunity.

Successful performance of all tasks, as observed and recorded by an evaluator, will result in a recommendation to the "authority having jurisdiction" (of the trainee), that the trainee be certified in that position. Evaluation and confirmation of the trainee's performance while completing all tasks will normally require more than one training assignment and several different evaluators. Incidents lasting several days may involve multiple evaluators. Tasks may be evaluated on incidents, simulation/tabletop exercise, planned events, in training and HSEEP compliant functional or full-scale exercises and in other work situations as long as there is a qualified evaluator.

It is important performances be critically evaluated and accurately recorded by each evaluator. All tasks must be evaluated.

The Interstate Incident Management Team Qualifications System [IIMTQS] Guide lists the definitions for trainee, evaluator, training officer and authority having jurisdiction.

Responsibilities:

1. Authority having jurisdiction (AHJ):

- Select trainees based on the needs of their organization or to fulfill their obligations to support mine operations for small mines and mine-related projects, or other Mutual Aid agreements.
- Provide opportunities for evaluation and/or making the trainee available for evaluation.

2. Training Officer:

- Providing the correct version of the PTB to the individual in order to document performance.
- Explaining to the trainee the purpose and processes of the PTB as well as the trainee's responsibilities.
- Tracking progress of the trainee.
- Identifying incidents or situations where the trainee may have evaluation opportunities.
- Identifying and assigning an evaluator who can provide a positive experience for the trainee, when the evaluation opportunity is within the AHJ's jurisdiction.
- Receiving and filing documentation from the assignment.

3. **The Individual/ Trainee:**

- Reviewing and understanding instructions in the PTB.
- Identifying desired objectives/goals whenever an opportunity for evaluation is recognized.
- Providing background information to an evaluator.
- Assuring the evaluation record is complete.
- Completing all tasks for an assigned position within the timeframe allowed for that position. All tasks with an approval older than the allowed timeframe must be reevaluated.
- Notifying the local AHJ /training officer when the PTB is completed, and obtaining the appropriate signature recommending certification.
- Retaining the original PTB and provide a copy of the PTB to the appropriate individual for review by the State Qualification Review Committee (SQRC) (refer to the current edition of the *IIMTQS Guide*).

4. **Evaluator(s):**

- Being qualified and proficient in the evaluated position.
- Meeting with the trainee and determining past experience, current qualifications and desired objectives/goals.
- Reviewing tasks with the trainee.
- Explaining to the trainee the evaluation procedures that will be utilized and which tasks may be performed during the evaluation period.
- Accurately evaluating and recording demonstrated performance of tasks. Dating and initialing completion of the task to indicate satisfactory performance. Unsatisfactory performance should also be documented.
- Evaluate the numbered tasks only. Do not evaluate bullets as they are provided as examples or additional clarification.
- Completing the Evaluation Record found at the end of each PTB.

5. **The Final Evaluator:**

- Being qualified and proficient in the position being evaluated.
- Reviewing the trainee's record to ensure completeness.
- Signing the appropriate verification statement found in the beginning of the PTB when all tasks have been initialed.
- Ensuring all tasks have been completed within the three years prior to submission for final approval.

6. **Incident Training Specialist**

- Issue the PTB with concurrence of employing/sponsoring organization to document task performance.
- Identify incident evaluation opportunities.
- Assist trainees, coaches/trainers and evaluators with proper documentation.
- Conduct progress reviews and answer questions.
- Ensure that coach/trainer and evaluators are qualified and can make accurate and honest appraisal of the trainee's performance.

Position Tasks and Associated Task Book Codes

The tasks required of a position range in criticality. A Trainee must demonstrate competency at critical tasks while functioning in the target position on an incident. The IIMTQS recognizes that the nature of some less critical tasks may be performed on planned events, in exercises, or in other situations and be sufficient demonstration of competency upon which to base qualification.

Each task in this Position Task Book has at least one code associated with the situation(s) within which the task MUST be completed. Performance of any task in a situation(s) other than that required by the task's code(s) is not valid for qualification.

If more than one code is listed, the task may be completed in any of the situations (e.g. If code **I1**, **I2**, and **O1** are listed, the task may be completed in any of the three situations). The evaluator should circle the evaluation code for which the task was evaluated.

Definitions for these codes are:

I = Task must be performed on a mine or tunnel rescue response which meets the following criteria:

- Is managed under the Incident Command System (ICS)
- Requires an Incident Action Plan (IAP) by Mine Management's or OSHA's Incident Commander
- Mine or Tunnel site response for: Unusual event, Personnel Rescue / Recovery, or Rehabilitation.

O1 = Task can be performed in the following situations:

- Planned Training Exercise
- MSHA Defined MERD (Mine Emergency Response Development) Contest
- "Full Scale Exercise" or "Functional Exercise" as defined by HSEEP (see IIMTQS Section XIII. Qualifying Incident, Event, and Exercise Guidelines; Qualifying Exercise Attributes)

O2 = Task can be performed in any of the following situations if the situation affords the opportunity to evaluate the knowledge/skills associated with the ICS position:

- Planned Event or Exercise not meeting the requirements in O1.
- Training
- Daily Job

There are numerous bullet statements listed under each task. The bullet statements are listed as guidelines/examples for the evaluator to consider when insuring the intent of the task has been completed. Not all bullet statements for a task are required to be completed if the overall intent of the task has been satisfied.

Evaluate the numbered tasks ONLY. DO NOT evaluate bullets; they are provided as examples/additional clarification.

Competency: Complete ICS and MSHA Training required for a Mine Rescue Technician.

Description: The qualification and training of; Mine Rescue Technicians, Mine Rescue Stations and Mine Rescue Teams, are defined by federal regulations issued by The Mine Safety Health Administration (MSHA). When this completed PTB is submitted to the certifying official for review, the applicant must self certify that the following training is current: Time under Oxygen current with 2 hours every other month, MSHA Safety Refresher within last year and Physicians Exam with fitness determination within last year.

TASK	C O D E	Evaluation Record Number	EVALUATOR: Initial & date upon completion of task
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Behavior: Attend and successfully complete the following MSHA and ICS training.

1. Complete Incident Command System, Federal Emergency Management Agency (FEMA) Coursework: ICS-100 Introduction to Incident Command System, ICS-200 Incident Command System, ICS-700 National Incident Management System AND ICS-800 National Response Plan.	O1 O2		
2. Complete Initial 20 Hour MSHA mine rescue team training, required by 30 CFR Part 49. Initial training must include operation and maintenance on the specific rescue breather applied by your mine rescue team. Reference Document: MSHA 3026 Initial Mine Rescue Team Training Coal and Metal/Nonmetal Mines.	O1 O2		
3. Complete additional team training, that includes the following modules; Surface Organization (ICS); Mine Gases; Mine Ventilation; Exploration; Fires, Firefighting and Explosions; Rescue of Survivors and Recovery of Bodies; Mine Recovery; Mine Rescue Training Activities. Reference Document: MSHA 3027 Mine Rescue Team Training Metal and Nonmetal Mines.	O1 O2		
4. Complete Basic Adult CPR/AED training, initial in person class is only coursework acceptable, renewals may be done on-line. Program to be according to one of the following criteria: American Heart Association (AHA), American Red Cross (ARC), National Safety Council (NSC) or training program approved by the International Liaison Committee on Resuscitation (ILCOR). Basic Life Support (BLS) training from AHA or ARC is acceptable for completing this training task. (Tasks 4 and 5 can be completed in a single course offering)	O1 O2		
5. Complete Basic First Aid class, initial in person class is only coursework acceptable, renewal may be done on-line. Program to be according to one of the following criteria: American Heart Association (AHA), or American Red Cross (ARC). Emergency Medical Responder (EMR) training is acceptable for completing this training task. (Tasks 4 and 5 can be completed in a single course offering)	O1 O2		

TASK	C O D E	Evaluation Record Number	EVALUATOR: Initial & date upon completion of task
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Behavior: Master basic rope rescue skills for high angle and vertical lift / descent of self and injured person(s)

<p>6. Applying rope or webbing, tie all of the following knots so they are properly dressed, and recognizable; a) figure 8 on a bight with safety, b) clove hitch with safety, c) half hitch, d) figure 8 follow-through (trace 8) with safety, e) overhand safety knot, f) double fisherman’s with adequate tail, g) water knot (overhand bend or ring bend) with safety, h) square knot with safety, and i) demonstrates ability to tie a prusik hitch to mainline.</p>	O1 O2		
<p>7. On a volunteer subject or weighted dummy, place subject into a climbing harness (seat or full body), while they remain horizontally on the ground (rolling them from side to side is acceptable).</p>	O1 O2		
<p>8. While inside an underground mine , or mine training simulator, demonstrate ability to identify or create safe anchor points for rope systems, applying points on: roof, rib, equipment, or harness to stationary fixture. The need for redundant anchor point(s) must be assessed.</p>	O1 O2		
<p>9. Rig a litter with volunteer subject or weighted dummy, for a vertical lift through a simulated 30” diameter escape way rise. Construct a rope system that applies simple mechanical advantage through a minimum vertical haul distance of 10 feet. The movement must be controlled, held in place when needed.</p>	O1 O2		
<p>10. Construct and operate a belay system during a lowering or raising operation, given an operating lowering or hauling system. The belay line is not to be loaded during operation of the primary rope system, the belay system is prepared for actuation at all times during the operation.</p>	O1 O2		

Behavior: Ensure readiness for assignment.

<p>11. Obtain and assemble a “go kit “or “ready bag” that includes materials needed for assignment and self support for initial 48 hours</p> <p>Suggested Items</p> <ul style="list-style-type: none"> • <i>MSHA approved: Helmet, Eye & Hearing Protection</i> • <i>Work Gloves, Knee Pads, Steel Toed Boots</i> • <i>Two sets of fire resistant coveralls</i> • <i>Change(s) of underwear / socks</i> • <i>Snacks / Food items / Water bottle</i> • <i>Toiletries Kit – medicines – ear plugs (for sleeping)</i> • <i>Personal hand held flash light and/or Tools</i> • <i>Agency ID / Qualifications Card / Drivers License ID</i> 	O1 O2		
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TASK	C O D E	Evaluation Record Number	EVALUATOR: Initial & date upon completion of task
12. Mine Ventilation – For each mine on which you are a primary or secondary responding team member, review mine ventilation plan and identify all: Intended Air Flow Directions, Permanent Seals, Passage doorways or flow control dampers (identify if normally closed or normally open) and points of forced ventilation. Discuss any site specific hazardous gas present at each mine.	O1 O2		
13. Obtain complete information upon activation. <ul style="list-style-type: none"> • <i>Incident/Event name.</i> • <i>Incident order number.</i> • <i>Reporting location.</i> • <i>Reporting time.</i> • <i>Transportation arrangements/travel routes.</i> • <i>Contact procedures during travel (telephone/radio).</i> 	I O1		
14. Arrive properly equipped at incident assigned location within acceptable time limits	I O1		
15. Check in according to receiving agency/organization guidelines.	I O1		

Behavior: Gather, update, and apply situational information relevant to the assignment.

16. Obtain briefing from Mine Management / Agency Administrator / Incident Commander / MERD Administrator.	I O1		
17. Participate in Team briefing to identify specific hazards, and steps to assure a safer assignment evolution.	I O1		
18. Participate in Team meeting to: 1) Identify strengths / weaknesses of individuals and their equipment. 2) Determine team positions of: Captain, Gas/Instrumentation, Map / Navigation, Medical, Co-Captain and Fresh Air Base.	I O1		

Behavior: Establish Effective relationships with relevant personnel.

19. Conducts self in a professional manner. <ul style="list-style-type: none"> • <i>Respectful and courteous to others.</i> • <i>Respectful of public and private property</i> • <i>Follows Chain of Command</i> 	I O1 O2		
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TASK	C O D E	Evaluation Record Number	EVALUATOR: Initial & date upon completion of task
20. Establish and maintain positive interpersonal and interagency working relationships.	I O1		

Behavior: Anticipate, recognize and mitigate unsafe conditions

21. Identify and correct unsafe actions or conditions	I O1		
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Behavior: Modify approach based on evaluation of incident situation

22. Maintain situation awareness and adjust tactics as necessary	I O1		
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Behavior: Debriefing, Demobilization and Check-out

23. Contribute to post event debriefing and/or draft written after-action report. Include lessons learned and possible enhancements / changes to equipment or procedures.	I O1 O2		
24. Clean, disinfect and prepare for storage, breathing apparatus applied in an event or exercise.	O1 O2		
25. Demobilize and check out, according to instructions from incident supervisor.	I O1 O2		

Evaluation Record # 1

TRAINEE NAME	TRAINEE MIN (Miner Identification Number)
Evaluator's Information	
Evaluator's Name:	
Evaluator's MIN:	
Incident Position/Assignment	
Evaluator's Agency/Organization:	
Evaluator's Office Title:	
Agency/Organization Address:	
Phone and Email:	
Evaluator's Relevant Certification and Qualification System:	
Name and Location of Exercise/Event/Incident /Training:	
Type (Team Training, MERD, Incident, Co-training with other agencies :	
Duration: <i>(inclusive dates in Trainee status and number of operational periods in Trainee status)</i>	
<p>Recommendation: The tasks initialed and dated by me have been performed under my supervision in a satisfactory manner by the above named Trainee. I recommend the following for further development of this Trainee.</p> <p>_____ The individual has successfully performed all tasks for the position and should be considered for certification.</p> <p>_____ Not all tasks were evaluated on this assignment and an additional assignment is needed to complete the evaluation.</p> <p>_____ The individual attempted but was not able to successfully complete certain tasks (comments below) or additional guidance is required.</p> <p>_____ The individual is deficient in the performance of tasks for the position and needs further training in both required knowledge and skills prior to additional assignment(s) as a Trainee (comments below).</p>	
Recommendations/Comments <i>(Attach additional comment sheets as needed.):</i>	
Evaluator's Signature:	Date:
Evaluator's Initials:	

Evaluation Record # 2

TRAINEE NAME	TRAINEE MIN (Miner Identification Number)
Evaluator's Information	
Evaluator's Name:	
Evaluator's MIN:	
Incident Position/Assignment	
Evaluator's Agency/Organization:	
Evaluator's Office Title:	
Agency/Organization Address:	
Phone and Email:	
Evaluator's Relevant Certification and Qualification System:	
Name and Location of Exercise/Event/Incident /Training:	
Type (Team Training, MERD, Incident, Co-training with other agencies :	
Duration: <i>(inclusive dates in Trainee status and number of operational periods in Trainee status)</i>	
<p>Recommendation: The tasks initialed and dated by me have been performed under my supervision in a satisfactory manner by the above named Trainee. I recommend the following for further development of this Trainee.</p> <p>_____ The individual has successfully performed all tasks for the position and should be considered for certification.</p> <p>_____ Not all tasks were evaluated on this assignment and an additional assignment is needed to complete the evaluation.</p> <p>_____ The individual attempted but was not able to successfully complete certain tasks (comments below) or additional guidance is required.</p> <p>_____ The individual is deficient in the performance of tasks for the position and needs further training in both required knowledge and skills prior to additional assignment(s) as a Trainee (comments below).</p>	
Recommendations/Comments <i>(Attach additional comment sheets as needed.):</i>	
Evaluator's Signature:	Date:
Evaluator's Initials:	

Evaluation Record # 3

TRAINEE NAME	TRAINEE MIN (Miner Identification Number)
Evaluator's Information	
Evaluator's Name:	
Evaluator's MIN:	
Incident Position/Assignment	
Evaluator's Agency/Organization:	
Evaluator's Office Title:	
Agency/Organization Address:	
Phone and Email:	
Evaluator's Relevant Certification and Qualification System:	
Name and Location of Exercise/Event/Incident /Training:	
Type (Team Training, MERD, Incident, Co-training with other agencies :	
Duration: <i>(inclusive dates in Trainee status and number of operational periods in Trainee status)</i>	
<p>Recommendation: The tasks initialed and dated by me have been performed under my supervision in a satisfactory manner by the above named Trainee. I recommend the following for further development of this Trainee.</p> <p>_____ The individual has successfully performed all tasks for the position and should be considered for certification.</p> <p>_____ Not all tasks were evaluated on this assignment and an additional assignment is needed to complete the evaluation.</p> <p>_____ The individual attempted but was not able to successfully complete certain tasks (comments below) or additional guidance is required.</p> <p>_____ The individual is deficient in the performance of tasks for the position and needs further training in both required knowledge and skills prior to additional assignment(s) as a Trainee (comments below).</p>	
Recommendations/Comments <i>(Attach additional comment sheets as needed.):</i>	
Evaluator's Signature:	Date:
Evaluator's Initials:	