

Great Basin Engine Academy Executive Summary 2008



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**Great Basin Engine Academy
Executive Summary
2008**

Introduction

The first annual Great Basin Engine Academy (GBEA) was held in Layton, Utah at the Davis Conference Center and the Uinta-Wasatch-Cache National Forest Air Tanker Base located at Hill Air Force Base April 28 – May 9, 2008. There were 46 nominations received, and 24 students selected to attend the academy. Of the 46 nominations, all were Forest Service employees from Region 4. Of the 24 students who attended, 22 successfully completed the academy. The top student, Kelly Cornwall from the Fishlake National Forest, received 95%, while the class average was 91%. The top engine company was Type 6 Engine Company 3, which consisted of Kelly Cornwall, Kyle Severe from the Salmon-Challis, Aaron Fischer from the Boise, and Eli Grooms from the Sawtooth. The company was coached by Todd Zumhofe and had a combined score of 92%.

The testing consisted of 2 pretests, a PM test, a stationary pumping practical, a driving pumping practical, 2 driving skills tests, a mid-term, and a final exam. Successful completion of this course requires a score of 80% overall. Any score less than 70% is not a passing score (this does not include the pretest scores). Students can pass academically; however still fail in the practical exams. If a student passes the academic portions, but fails the practical portions, he or she will be encouraged to return next year to complete the practical portions of the academy. Failure academically will require a student to retake the entire 2 week academy.

The Academy mission is to provide opportunities for students to refine their driving skills in a variety of environments, refine their pumping and hydraulics skills, become more proficient in their operation and maintenance of fire apparatus, and provide the home unit with a comprehensive evaluation of the student. The Academy objectives are as follows:

- A. Upon completion of the Great Basin Engine Academy, each trainee will demonstrate a working knowledge of the Region 4 Type 6 and 4 Engines. Increased knowledge of maintenance, operation, capability, and limitations of these engines is the academy's main focus. There are three core sections of instruction:
 - 1. Unit I - Vehicle and Pump Maintenance
 - 2. Unit II - Driving
 - 3. Unit III - Pumping and Hydraulics

- B. Emphasis throughout the engine academy is placed on increasing the trainees' level of safety awareness in all aspects of fire engine operations. In addition, the underlying goal of the Engine Academy is to realize a future cost savings to the government through:
 - 1. Recognition of potential equipment breakdowns or malfunctions caused by improper or neglected preventative maintenance procedures.
 - 2. Increased level of safety awareness, which may prevent avoidable accidents, therefore fewer dollars spent on lost-time accidents and/or vehicular damage.
 - 3. Increased level of skill and proficiency with fire engine operations through formal training, increasing wildland fire effectiveness.

- C. Employee Development

1. Provide the foundation for future Managers, Engine Captains, Engine Operators, Lead Crew, and Senior Firefighters.
2. Provide students with increased level of awareness as to their capabilities and supervisory responsibility.

This executive summary will briefly review events that occurred in each functional group, as well as list the lessons learned and opportunities for improvement. The Engine Academy Team is comprised of 32 personnel. The Great Basin Engine Academy Organization Chart is located in Appendix A, page 7.

Command

A vision for the planning, management, presentation, and implementation of the Great Basin Engine Academy is to eventually have all the positions on the management team filled by personnel from the engine community who are graduates from a Forest Service Regional Engine Academy (Region 3, 4 or, 5). A target date for this vision is 2011. The primary limiting factor is having enough qualified and motivated engine academy graduates available in Region 4 to participate.

The first GBEA had 34 management team members with 14 positions being held by Engine Academy graduates. In 2009 hopefully an additional 3-6 management team can be held by graduates. By 2010 nearly all positions should have graduate shadowing an experienced team member.

The 2008 GBEA is 100% Forest Service personnel, both management team members and students. Federal wildland fire management agencies in the Department of Interior will be approached in 2009 to see if there is any interest in participating in the academy.

Safety

During the 2008 Great Basin Engine Academy there were no personal injuries to any team members or students and no reportable vehicle accidents. A total of ten JHA's were reviewed and signed by the team and students. The JHA's were as follows: office work, driving, vehicle maintenance, vehicle fire suppression, auto shop, field work, personal safety, testing fire hose, traffic accidents/medical accidents, and working around fire engine apparatus. There was one near miss while traveling in the city with a heavy engine and a faulty signal light. The PM check was completed and the broken signal light noted. However, staff members failed to put it out of service and use the backup engine. The driver completed a safety circle and knew that the PM was completed, but was unaware of the faulty light. A coach in an engine that was following the engine with the faulty turn signal radioed ahead to the engine and notified them of the problem. The engine with the faulty turn signal came back to the Davis Conference Center where they swapped vehicles. On the off-road course a student bent a step on a type 4 engine when they hit a rock while he was backing down hill. Lastly, another student drove approximately 150 ft with the park brake applied and burned the rotor on the brake assembly.

Information

A photo/video authorization was obtained from the US Air Force Headquarters 75th Air Base Wing prior to the Academy. The only management team members authorized to take photos and videos at the tanker base were the two information personnel. The following protocol pertaining to the authorization adhered to:

- All cameras and other picture taking devices (cell phones with picture taking capability) are strictly prohibited from use within controlled areas unless approved in writing by a commander, deputy or authorized representative of the controlled area.

During skills day, on May 7, 2008, a VIP/Media event was held at the Wasatch-Cache National Forest Tanker Base. The VIP event was attended by 8 interested military and Forest Service officials. The media event was attended by KSL, Channel 5, John Hollenhorst; Ogden, Standard Examiner, Charlie Trentelman and Davis County Clipper, Mitch Shaw. All stories were positive and informative. Briefing packets were prepared for the VIP/Media event. The packets included the following:

- Briefing Paper
- Photos
- Contact Lists

A DVD containing photos and video footage taken during the academy of student's activities was prepared and given to students, team members, and military personal. The DVD's are also being used for historical documentation.

Planning

The planning section served two roles in the 2008 GBEA: first in the development and planning process and secondly in the operational phase of the event. Several planning meetings were critical to start the academy off on the right foot. Meetings topics included:

- Development of the academy schedule and incident action plans.
- Development of call letters to request engines and support from through out the region.
- Development of the student nomination and selection process.
- Pre work delivery and review.
- The Dry Run: Classroom, Lesson Plan, and Practical Exercise preparation.

A wireless router and external hard drive was found to be beneficial to store all the data, files, and folders for the GBEA. Much of that data has been transferred to the Great Basin Engine Committee intranet website, where it is available to the engine community.

During the operational phase of the event the team found the ICS positions, Plans and Planning Operations, instrumental in facilitating daily briefings, classroom sessions, and exams. These positions allowed the team to stay on track, and the flexibility to make adjustments with little interruption to the students in the academy.

Logistics

Students were housed at the Hilton Garden Inn which is attached to the Davis Conference Center. Due to a shortage of available rooms team members stayed at the Holiday Inn Express, Townplace at Marriott, and La Quinta as well as the Hilton Garden Inn. All hotels were within 5 minutes walk of the Davis Conference Center. Restaurants, malls, grocery stores, and theaters were plentiful and all within easy walking distance of the Davis Conference Center. Cost savings in housing was accomplished by doubling up students and staff. Those staff members wishing to have individual rooms funded the difference through their home units.

Students and staff were required to provide their own meals. Water Bottles were provided to the students to save costs of providing bottled water and eliminated the need to recycle disposable plastic bottles.

Purchasing of supplies was limited to a few authorized individuals. All purchases were recorded on a ledger spreadsheet, individually identified by a sequenced numbering system. A copy of each receipt will be maintained in a receipt folder within the Finance file box.

Support Staff

The support staff consisted of 7 individuals. The group was responsible for setup, breakdown, and support of daily field activities at Davis Conference Center and the tanker base at Hill. Three of the staff were previous Engine Academy (R3) graduates, four were CDL qualified, and two were identified as alternate students, in the event of a last minute cancellation. Having academy graduates and CDL qualified individuals as support staff was invaluable to maintaining flexibility. They knew what was needed for each station and course, required minimal supervision and were proactive in identifying potential problems and maintaining readiness at the stations and driving courses. Two UTV's were extremely useful, saving time and energy in responding to needs at the tanker base.

Finance

The academy budgeted \$75,000 for implementation of our first year. The budget was based on meeting room costs, travel & per diem, supplies, overtime, and mileage. Determination of a budget came from estimates from Region's 3 and 5. GBEA actual budget fell in between Regions 3 (\$191,000) and 5 (\$74,000). The total spent for the 2008 Great Basin Engine Academy was \$125,600. The increase in estimated costs came from additional team members being added, some unforeseen costs associated with the porta potties/hand washing stations, unexpected purchases of needed supplies and equipment, additional meetings needed for planning prior to the academy, and the high cost of mileage for the engines. Without these additional expenses for the first year, the academy may not have been such a success.

The following table displays the cost break down for the 2008 GBEA.

Travel/ Per Diem	Purchases	Overtime	Mileage	Totals
\$59,755	\$13,263	\$37,302	\$15,280	\$125,600

Operations

The operations section consisted of two positions "field" and "planning". As shown in the team organization chart, the Coaches, Driving, Pumping, and Maintenance Groups all worked for operations.

The GBEA was implemented after having shadowed the Southwest Engine Academy (SWEA) for the previous 3 years. Throughout the four main weeks of the GBEA, including the "Dry Run and Weeks 0, 1, and 2", the operations organization was involved in both the refining of the planned schedule, and also the creating of more efficient and practical ways to implement the structure of day to day events. Understandably, as this was the first year of implementation, there were many hurdles that popped up and had to be overcome. Thanks in part to the flexibility of the operations organization as a whole; the academy was successfully coordinated and implemented.

Coaches

There were six coaches and one coach leader who were identified early to ensure full academy commitment. Each coach was assigned four students per Engine Company. The coaches attended all early spring cadre meetings to become involved and informed and provide input to the building of the academy. All coaches were assigned four students each. They made early contacts with their students one month prior to attending the academy.

Coaches met with their students at the hotel lobby the night of check-in for introductions and greetings. They were involved and available to the students at all times for instructing, mentoring, and coaching.

Coaches were assigned skills stations to instruct during the academy. They led the after hours evening skills activities and had daily documentation on each of their students.

Driving

The Driving Unit was staffed with 2 personal this year. Driving exercise for the test day consisted of the Dog Leg, and Evasive maneuvers, both for the Type 6 and Type 4 engines.

Diving conditions were a bit challenging due to inclement weather. The paint that was required to be use on the tarmac at Hill Field was a chalk based paint that could easily be washed off with a pressure washer. The paint required repeated repainting of all the tracks after it rained. The lesson learned to deal with the paint fading or washing away after precipitation was to move the cones and delineators off the painted marks.

The check out drive during week one was a short loop that was conducted on highway 84 up Weber Canyon. This drive took approximately thirty minutes. The engine company's individual coach evaluated the students in a one-on-one setting while conducting the check out drive. The remaining students from each engine company remained at the Davis Conference Center at the study hall covering pump theory and hydraulics.

The cross country and off road driving occurred simultaneously. It was felt by combining driving courses and having the coach work with the students one-on-one would allow the remaining students to better utilize the remaining day to work on pumping, driving the dog leg, and learning more about cooperators equipment. It was felt this option would be a greater benefit to the students than following the engine in a chase truck. Each student was evaluated for a two hour period by a coach while conducting the cross country and off road drive.

The day prior to test day (Skills Day) the students were allowed to run the dog leg, and evasive maneuvers courses. Each student were timed and graded as if being tested. This allowed each student a total of 5 runs down the track on the dog leg and twice on the evasive. Each individuals combined average was shared with the students. Due to weather, skills day proved to be challenging. All field exercises were shut down due to rain for approximately one hour, however the delay did not effect the over all day.

The greatest challenge the driving unit experienced was trying to bridge National Fire Protection Association (NFPA) testing and requirements to our GBEA Academy curriculum to offer each student Pumper/Operator and Code III certification. The driving group worked diligently with Brad Wilkes from Layton City Fire Department and Utah Fire and Rescue (UFRA) to offer accredited certification through Utah Valley State Collage (UVSC). Due to time constraints, testing for this certification was not accomplished at the academy. To overcome this deficiency, approximately 5 days following the end of the academy each student was mailed the DVD **“Coaching The Emergency Vehicle Operator II: FIRE”** for

online interactive training from the National Safety Council. Upon successful completion of the self directed training each student is issued a certificate of completion.

Pumping

The Pumping Unit was staffed with three personnel for the first year. Subjects that were covered during classroom setting were, Pump Theory, Hydraulics, Portable Pumps, and Foam. All classroom curriculums were presented thoroughly by instructors and easily understood by students. We think the test scores would prove this. A pumping representative was present during the mid-term and final exams to answer any questions by student and to assist in grading. Quizzes were successfully administered for Pump Theory and Field Pumping. A practical test on proper Drafting Procedures was administered individually for each student and successful completion was required for course completion. The only notable problem that we experienced was the pre-work. All the pre-work that was sent out was designed around the Cascade Friction Loss Calculator, but a last minute decision was made to send the students the Wildfire Friction Loss Calculator instead of the Cascade. Most friction loss calculator brands are close in their answers however the Cascade and the Wildfire are very different. A lesson learned for the 2009 academy is to make sure all pumping unit leaders and coaches have the appropriate calculator that goes out with the pre-work.

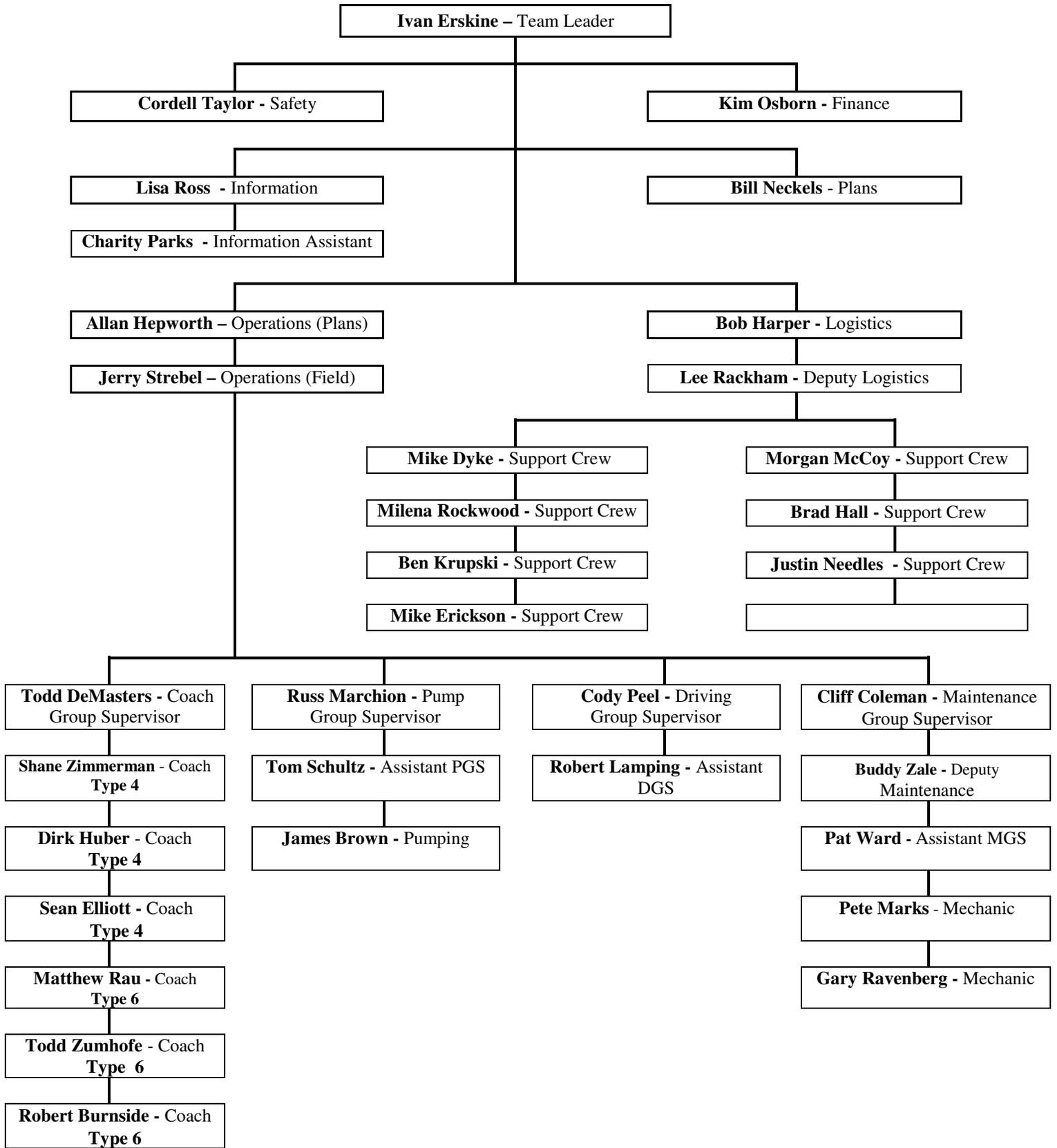
Subjects covered during field portions included portable pumps, series and parallel hose lays, proper drafting techniques, mobile attack, foam, hydrant use, and ejectors. Special thanks go out to all the coaches for helping on the field operation. Without this extra assistance and knowledge, these portions of the academy would not have been so effective and successful. Evening study sessions were held nightly for Hydraulics and Field Pumping/Drafting.

In future Engine Academies, the necessity for teaching basic hydraulics and portable pumps should be eliminated. This information is now required to be taught and covered in S-211, Pumps and Water. If students learn basic hydraulics and portable pumps on the home units, then the pumping group's proposal is that the engine academy pumping curriculum should change from basic information to real world, hands on practical teaching, (i.e. large complex hose lays that students would have multiple ways of doing and have to incorporate with multiple pumps with series and parallel hose lays). It is proposed the academy target 2010 for this curriculum change.

Maintenance

Eleven Type 4 and Eight Type 6 Engines reported one week prior to the Academy starting date to be inspected for use during the Academy. The initial inspections determined one Type 4 and one Type 6 Engine had serious maintenance problems and could not be used during the Academy. The Type 6 returned to the home unit and the Type 4 was parked in an area so that it would not be used. Many of the remaining Engines had small issues that were repaired at the Academy, both on the truck and pump units. The remaining Engines, with more complicated truck maintenance issues were taken to local service shops for repairs. See **Appendix D: Engine Maintenance Record**, page 9 for engine maintenance details.

Appendix A: 2008 Great Basin Engine Academy Organization



April 28, 2008

Appendix B: 2008 Engine Companies

Great Basin Engine Academy Engine Companies
April 28, 2008

Type 6 Engine Company 1	M/F	Forest
Alex Price	M	PAF
Bruce Jenkins	M	MLF
Casey Moore	M	CTF
David Veater	M	DIF
Coach: Robert Burnside		

Type 4 Engine Company 4	M/F	Forest
Paul Clement	M	ASF
Karl Delange	M	UWCF
Lisa Schuldt	F	UWCF
Alex Enna	M	BTF
Coach: Dirk Huber		

Type 6 Engine Company 2	M/F	Forest
Daniel Bartel	M	SCF
James Ramirez	M	BTF
Dane Ostler	M	CTF
Nicholas Schenck	M	FIF
Coach: Matt Rau		

Type 4 Engine Company 5	M/F	Forest
Alton Pickup	M	ASF
Steve Clezie	M	STF
Sean Whalen	M	HTF
Chance Stewart	M	DIF
Coach: Shane Zimmerman		

* Type 6 Engine Company 3	M/F	Forest
Eli Grooms	M	STF
Aaron Fischer	M	BOF
Kyle Severe	M	SCF
Kelly Cornwall **	M	FIF
Coach: Todd Zumhofe		

Type 4 Engine Company 6	M/F	Forest
Brodie Wilson	M	ASF
Rob Smolczynski	M	BOF
Brock Williams	M	BOF
John Svancara	M	PAF
Coach: Sean Elliot		

* Top Company

** Top Student

Appendix C: 2008 Lessons Learned

The following is a list of items discussed or recommended to implement for future academies. The list is not inclusive, but captures the items discussed in C & G meetings, daily debriefs, at the formal AAR, or recommended in writing by the Management Team. These are in no specific order.

Lesson Learned	Action Items/ Problem Resolution	Individual/s Responsible
Strive for more diversity in the students.	<ul style="list-style-type: none"> • Make an effort recruit more diversity during nomination process 	Erskine
Tempo lost during the opening ceremony. Must have more drive and energy for our purpose.	<ul style="list-style-type: none"> • Streamlined opening ceremony for smoother delivery of Academy objectives 	Erskine, Neckels,
Opening ceremony order needs to be reviewed and corrected.	<ul style="list-style-type: none"> • Streamlined opening ceremony 	Erskine, Neckels,
Present “You might be a wildland firefighter if:” at the end of the first day.	<ul style="list-style-type: none"> • Rescheduled and moved to end of first day 	Erskine, Neckels,
Provide specific directions and numerous contacts to individuals delivering engines to Hill AFB at the beginning of week zero.	<ul style="list-style-type: none"> • Directions posted on engine web site and delivered to Forest FMOs 	Harper
Reserve ICP (board room) at Davis Conference Center for Thursday, Friday, and Saturday of week 0.	<ul style="list-style-type: none"> • ICP room reserved Starting Wednesday of week zero 	Harper, Osborn
Reserve a “Block” of rooms a Hilton Garden Center for team members and students with cut off date for team members to make reservations starting with the dry run week and the three weeks of the academy.	<ul style="list-style-type: none"> • Block of rooms reserved for 2009 	Harper
Arrange for use of the tarmac (be able to practice drive dog leg and evasive maneuvers) at the tanker base during the dry run week.	<ul style="list-style-type: none"> • Dry run week cancelled for 2009 due to travel cap 	Erskine
Have all students checked-in and have their pictures taken Sunday evening. Start the actual academy intro on Monday morning at 0800.	<ul style="list-style-type: none"> • All students will check in on Sunday night. Pictures will be taken on Monday from 0800 to 0845 hour 	Osborn
Classroom doors should be shut with minimum entry when class is in session.	<ul style="list-style-type: none"> • Should put on list of housekeeping 	Erskine
Leave keys in engine doors while parked at the Tanker Base.	<ul style="list-style-type: none"> • New practice to start in 2009 	Davis
Select a “Code 3, Red Lights and Siren” training to certify students for next years academy.	<ul style="list-style-type: none"> • National Safety Council selected for subject matter in 2009 	Erskine, Holdsambeck

Rent copy machine that will sort and staple. Try to get a color printer also.	<ul style="list-style-type: none"> • Copy machine rented that will sort and staple 	Harper
Send 182 e-mailed to student with top half filled out. Instruct them on what areas have to be signed.	<ul style="list-style-type: none"> • Each student required to fill out 182 and pay tuition for 2009 	Osborn
Instructors are responsible to hand out evaluations for the classes they teach.	<ul style="list-style-type: none"> • Instructors will hand out evaluations for the classes they teach in 2009. 	Instructors
Request clearance for pictures and video before the academy. Include the dry-run and weeks zero thru 2. Increase the number of people from two to four.	<ul style="list-style-type: none"> • Clearance requested for 2009 	Rackham, Pollock
The first person to use or move a vehicle each day from the "Line" must perform the PM check and document on the PM sheet.	<ul style="list-style-type: none"> • SOP for the 2009 Academy 	Huber
Either have students PM check their vehicle before the class briefing at 0800 or increase the time permitted to travel to and from DCC and HAFB from 15 to 30 minutes.	<ul style="list-style-type: none"> • Increase time permitted to travel to and from DCC and Hill AFB from 15 to 30 minutes in schedule 	Erskine, Neckels
Anytime the academy schedule changes the planning ops will make new copies for the team and distribute.	<ul style="list-style-type: none"> • Planning ops will make copies 	Hepworth
Refine the practical exercise sign out sheets. Try to narrow to 3: pumping (Drafting), driving (Dog-leg for T4 & T6), and hydraulics.	<ul style="list-style-type: none"> • Refine the practical exercise sign out sheets. 	Huber
Purchase a basic tool kit for used by the maintenance group at the academy.	<ul style="list-style-type: none"> • Purchased basic tool kit for academy 	Davis
In addition to making a repair order for each vehicle also "Red Tag" the key ring for that vehicle so everyone knows the vehicle is out of service.	<ul style="list-style-type: none"> • "Red Tag" the key ring 	Davis
Re-write question 6 – Total stopping distance question on the Driving Take Home Quiz.	<ul style="list-style-type: none"> • Question 6 – Total stopping distance on the Driving Take Home Quiz re-written 	Peel
Send an e-mail agenda three weeks before the opening ceremony to the guest speakers and all others.	<ul style="list-style-type: none"> • Sent an e-mail agenda three weeks before the opening ceremony to the guest speakers and all others. 	Erskine
Present house keeping (DCC facilities, including restrooms, coffee, etc.) first during the opening ceremony on day 1.	<ul style="list-style-type: none"> • Entered in opening ceremony PowerPoint 	Erskine
Have pumping, driving, and maintenance develop lesson plans for all field stations (pumping day, skills day, etc.) that are handed out to the students.	<ul style="list-style-type: none"> • Develop for the 2009 GBEA 	All unit leaders

Appendix D: 2008 Engine Maintenance Record

1.	Home Unit	Engine Number	Description	Repairs Needed	Repairs Completed
2.	BTF	4196	Type 6 Ford F-550	<ul style="list-style-type: none"> • No relief valve installed • No rock trap / strainer • Hard line reel brake non operational 	<ul style="list-style-type: none"> • None
3.	CTF	4202	Type 6 Ford F-550 2007	<ul style="list-style-type: none"> • Hard line reel brake non operational • No siren 	<ul style="list-style-type: none"> • Hard line reel brake checked out ok • Siren-home unit does not endorse siren use
4.	ASF	6326	Type 6 Ford F-550 2001	<ul style="list-style-type: none"> • Engine cooling fan broken • Lower radiator hose leak • Front main motor seal leaks • Front shocks leak • Tires- inside duels need replaced • Left outside duel mismatched • Pa and siren inoperable • # 1 valve doesn't close completely • Slight cress lower passenger door 	<ul style="list-style-type: none"> • Engine fan replaced • Lower radiator hose replaced
5.	ASF	6330	Type 6 Ford F450 2001	<ul style="list-style-type: none"> • Tie rod bent • Right alley light inoperable • Drafting problems 	<ul style="list-style-type: none"> • Tie rod repaired
6.	CTF	6475	Type 6 Ford F 550 2002	<ul style="list-style-type: none"> • Lower weather stripping loose both cab doors • Rear brake disk scoured both wheels • Pump pressure gauge inoperable • Side discharge coupling leaks • Hard line reel swivel 90 leaks • Foot valve inoperable • Primer pump malfunction drafting problems 	<ul style="list-style-type: none"> • Cleaned exhaust pump primer
7.	BOF	6998	Type 6 Ford F 550 2005	<ul style="list-style-type: none"> • Tie rod bent • Transmission/transfer case leaks • Radiator leak transmission cooler line fitting 	<ul style="list-style-type: none"> • Tie rod repaired
8.	MLF	6293	Type 6 Ford F-550 2001	<ul style="list-style-type: none"> • Right clearance light inoperable • Driver side seat torn • Left side window washer inoperable • Pump intake leaks at coupling • Pump gauge reads low, 30 psi • Right front strobe light inoperable 	<ul style="list-style-type: none"> • Right clearance light
9.	UWCF	0112	Type 4 Sterling 1998	<ul style="list-style-type: none"> • Fan belt • Right side hard line reel switch and brake 	<ul style="list-style-type: none"> • None – scheduled replacement 2009
10.	FIF	5834	Type 4 Ford F-800 1998	<ul style="list-style-type: none"> • Right rear amber light out • Fire extinguisher needs servicing • Minor leaks valves # 13 and # 17 	<ul style="list-style-type: none"> • None
11.	FIF	5962	Type 4 FL-70 Freightliner	<ul style="list-style-type: none"> • Tank sight tube needs replaced • No rock trap • Batteries bad 	<ul style="list-style-type: none"> • Replaced batteries

12.	UWCF	6297	Type 4 International 4800 2001	<ul style="list-style-type: none"> • Three windshield chips • Heated mirrors disconnected • Rear work lights and pump panel lights inoperable • Both lower front fenders cracked • Fuse box cover broken • Missing first aid kit • Pump gauge 10 PSI low • Hard line reel brake inoperable • # 2 valve leaks 	<ul style="list-style-type: none"> • None – scheduled replacement 2009
13.	PAF	6304	Type 4 International 4800 2000	<ul style="list-style-type: none"> • Light bar- right of way inoperable • Air filter crushed • Replace right rear tires soon • Foam selector dial leaks • Discharge side of pump leak 	<ul style="list-style-type: none"> • Air filter replaced
14.	PAF	6481	Type 4 International 4800 2002	<ul style="list-style-type: none"> • Transfer case cooler lines need replaced • Exhaust manifold leaks • Right rear brake chamber clamp bent • Speedometer sensor leaks • Ember screen on intake missing • Left hard line reel connection leaks 	<ul style="list-style-type: none"> • Truck is currently at shop for repairs
15.	UWCF	6298	Type 4 International 4800 2001	<ul style="list-style-type: none"> • Oil pan leaks • Transfer case front output shaft seal leaks • Speed sensor leaks • Transfer case breather cap missing • Front of flat bed cracked both sides • Right rear fuel tank support cracked • Transfer case cooler lines need rerouted • Right rear brake chamber clamp bent • Foot valve needs replaced • Siren on/off knob missing 	<ul style="list-style-type: none"> • None
16.	UWCF	6520	Type 4 International 7400 2002	<ul style="list-style-type: none"> • Light bar right of way lights inoperable • Cam shaft front seal leaks • Oil pan rear main seal leaks • Transfer case leaks • Oil filter on pump motor leaks • Throttle cable on pump inoperable 	<ul style="list-style-type: none"> • Oil filter on pump motor • Throttle cable on pump motor
17.	MLF	6635	Type 4 International 7400 2003	<ul style="list-style-type: none"> • Lower left front fender flare missing • Anti lock brake light on • Siren inoperable • Right reel hard line feed line leaks • Right and left reel hard line brakes missing • Truck first aid kit missing 	<ul style="list-style-type: none"> • Right reel hard line feed repaired
18.	ASF	6864	Type 4 International 7400 2004	<ul style="list-style-type: none"> • Foam fill pump inoperable • Light bar right of way inoperable • Right work light inoperable 	<ul style="list-style-type: none"> • Foam fill pump

