

Chapter Six:

RECORD KEEPING

The importance of keeping accurate and complete records of all aspects of a grooming program cannot be overemphasized. Good records are an important management tool, promote adherence to procedures, and may help limit liability should problems occur.

It is the responsibility of everyone to keep records. As pointed out in Chapter Five, a good preventive maintenance program is an important safety management tool, so keeping good records is a must. A cavalier attitude by any person toward not performing good recordkeeping that facilitates preventative maintenance should not be tolerated.

At the same time, if records are kept they should be used! Be sure that records are used to analyze the performance of the grooming program and as a yardstick to measure improvements. Don't just "file'em and forget'em."

Recommended Forms

All grooming programs are encouraged to develop forms to suit their particular needs. The following is a brief description of various forms that can be important to the management of a successful grooming program. Samples can be found in the Appendix.

Daily Groomer Operator's Log Form

It's important to the management of the grooming program that a running log is kept for each vehicle showing where and when it was used. Hour and odometer readings provide useful data and the remarks sections can be used to record any unusual events during the run for future reference. Some daily logs also incorporate a daily pre- and post-operation checklist, such as is shown on the sample Log in the Appendix. It is also recommended that a trail map, on which the trail segments groomed that day have been highlighted, is attached to the daily log to visually document what trails were groomed.

Grooming Equipment Maintenance Requests

The groomer operator has an important role in the overall preventive maintenance of the equipment. However, groomer operators may not be mechanics and need clear instructions as to what to check and how to tell if it's good or bad. Checklists such as the sample in the Appendix provide an easy format for operators to communicate the maintenance needs of the equipment to grooming managers and mechanics.

Vehicle/Equipment Reports and Maintenance Records

Every vehicle or piece of equipment should have its own log to track daily hours, miles/kilometers, fuel consumption, maintenance, and repairs. The examples in the Appendix can be combined on the front and back of one page to easily log monthly use and maintenance.

Corrective Action Form

Groomer operators are often the best “eyes and ears” for the trail system given the regularity and frequency that they travel the area’s trails. During grooming operations, operators may identify conditions on or directly adjacent to the trail that need correcting. A form like this provides a mechanism to report these situations, can document when they are corrected, and is important to overall trail safety and risk management.

CHAPTER QUIZ

1. Groomer operators’ only purpose is to groom trails and therefore should not concern themselves with watching for unsafe situations or missing signs along the trails or reporting these situations to the Grooming Manager.
True False
2. Record keeping is a nice thing to do and should be done only when an operator has time for it.
True False
3. It is important to track fuel, labor, maintenance, and other operating costs, along with the number of hours that are required to groom an area’s trails, to determine per hour or per mile/kilometer grooming costs. True False
4. A Daily Operator’s Log can:
 - a) be a waste of time
 - b) help document trails groomed, unusual events, and equipment use
 - c) increase liability
 - d) none of the above

Chapter Seven:

RECOMMENDATIONS for GROOMER OPERATOR CERTIFICATION

Purpose

It is recommended that groomer operators be certified to help ensure the proper operation and maintenance of snowmobile trail grooming equipment. Certification should consist of a combination of training and testing to help ensure equipment operators understand correct grooming principals, techniques, procedures and other pertinent subject matter. Certification can also help ensure that the expenditure of grooming funds results in smooth trails that are safe and hold up to snowmobile traffic as long as possible.

Who Should Be Certified?

While groomer operator certification requirements are ultimately a local decision by each state, province, territory, or subunits thereof, it is recommended that all groomer operators receive a minimum level of training and certification. In some areas, groomer operator certification may be mandatory in order for the grooming area to qualify for liability insurance. In all instances operator certification can serve as an excellent risk management tool, so it should be universally encouraged.

Since even experienced groomer operators can benefit from periodic training and refresher courses, it is recommended that, if an area adopts certification requirements, all operators receive the initial training as well as the initial certification, irrespective of their experience level or if they are an employee, volunteer, or contractor.

How Long Should A Certification Valid?

While the length of time a groomer operator certification is valid is a local decision, it is recommended that they be valid for no more than four years if the operator continues to operate the same type of equipment. If the grooming equipment is replaced with either newer models or a different type of tractor and/or implement, the operator's training and certification should be updated at that time to include training and certification for the new equipment.

Levels of Operator Certification

It is recommended that two levels be used for a Groomer Operator Certification Program:

- Level 1 – Trainee:** for those operators who have completed a minimum of four (4) hours of classroom training and successfully passed a written test.

Level 2 – Certified Groomer Operator: for those operators who have completed Level 1 requirements plus a minimum of 16 hours of supervised on-trail equipment checkout and operation.

It is recommended that a Level 1 Trainee Operator should not operate the grooming tractor without a Level 2 Operator or Grooming Manager/Instructor in the tractor with them. It is recommended that a Level 2 Operator be used to provide the minimum 16 hours of in-tractor equipment operation instruction to Level 1 Trainees.

Operator Certification Core Subjects

It is recommended that groomer operator certification relate to core subjects listed in Chapter One and covered by this Resource Guide, along with topics pertinent to local area conditions and procedures. The sample Groomer Operator Training Record checklist in the Appendix also provides a detailed list of potential training and certification topics. Additionally, the chapter quizzes in this Guide may be used by jurisdictions as a basis from which to develop local certification tests as applicable. Recommended core subjects for certification could include:

- **Introduction to Grooming:** glossary of terms; grooming objectives, principles and steps; basic snow physics; grooming manager and schedules; and the source of funding for the local grooming program.
- **Grooming Equipment Features:** general overview of tractors; tractor components and characteristics; front blades; general overview of implements; drag features; tillers; compactor bars; and snowmobiles as groomers.
- **Equipment Operation Guidelines:** operator safety; general operating guidelines; grooming basics; effective grooming tips for a drag; proper use of the front blade; tips for operating tracked vehicles; tips to avoid equipment damage; and Ten Common Operator Abuses.
- **Equipment Maintenance:** Four Elements of Preventative Maintenance; first time operation of new units; pre-season inspection and maintenance; pre- and post-operation/shift inspection; regularly scheduled maintenance; and off-season storage.
- **Record Keeping:** cover all logs and reports required by the local grooming program.
- **Local Issues:** local trail maps, trail routes, special closures or sensitive areas, local laws and regulations, emergency contacts and procedures.
- **Hands-On Equipment Operation and Check Out:** in-cab instruments and gauges, backing up the tractor, hooking implements to the tractor, starting and stopping, operating on the right side of the trail, side hill operation, front blade operation, implement operation, proper fueling procedures, pre- and post-operation visual inspections.

GLOSSARY OF TERMS

Compactor Bar: (Packer Bar)	A rear mounted bar with a plastic comb used to compress deep new snowfall (over 18 in. / 46 cm) prior to grooming the trail with a drag or for early season trail set-up.
Dead-Head Miles:	Return trip over the same trail because of a dead end trail.
Front Blade:	A front mounted blade used to doze snow drifts, to help pull new snow in from the sides of the trail, and to provide rear grooming implements a properly prepared surface to process the snow.
Groom:	To get into a state of readiness for a specific objective; to take care of the appearance of; to make neat and tidy = trail maintenance; the mechanical alteration of the snow to provide a safe, smooth surface for travel.
Groomed Miles:	Total miles put on the groomer during the process of grooming the entire trail system.
Groomer:	A grooming tractor equipped with grooming implements (drag, tiller, or compactor bar).
Groomer Operator:	An employee or volunteer that is in physical control of and operates the grooming tractor.
Grooming Drag: (Drag)	An implement pulled behind the grooming tractor which does the actual grooming of the snow on the trail bed. Also called a planer or surfacer by some manufacturers.
Grooming Manager:	A local official or club member charged with coordinating grooming activities, including establishing schedules and priorities. Some areas call this person the Trail Master or the Grooming Coordinator.
Grooming Speed:	The speed the groomer travels over the trail while performing the grooming operation (typically recommended to be 5 to 7 mph / 8 to 11 kph).
Grooming Tractor: (Tractor)	A heavy-duty, two or four-tracked vehicle for which the primary purpose is to provide the pulling power for grooming implements. Also called a Prime Mover.

Hours of Operation:	The time that the grooming tractor actually spends grooming the trails, not necessarily as recorded by the hour meter.
IASA:	The International Association of Snowmobile Administrators, which consists of state, provincial, territorial and federal government officials with responsibility for administering snowmobile trail, safety, and/or enforcement programs.
Miles of Trail:	One-way miles of trail in the system, including loops and dead-ends.
Moguls:	A pattern of mounds, dips, and ruts in a trail.
Operation Log:	Used to record the date, the hours of operation, miles of trail groomed as recorded by the vehicle odometer, time in and out, parts of the trail system groomed, and general comments regarding repairs and maintenance records.
Scarifier:	A blade used to scar icy surfaces to rough them up, usually mounted in the front row of multi-blade drags or on the bottom of the front tractor blade.
Snowmobile Trail:	A compacted snow road for use by snowmobiles and other authorized over-snow vehicles.
Tiller:	A hydraulically driven, rear mounted implement similar to a roto-tiller that mechanically processes and mixes snow.
Trail Bed:	The compacted snow surface or trail.
Trail Grooming:	The activity of producing a smooth, uniformly compacted snow surface with a uniform high density through the use of mechanical equipment.
Track Packing:	Using the tracks of the grooming tractor to pack the snow without the use of any grooming implements.

RESOURCES

A.F.M. Industrial – manufacturer of Trailmaker Drag and supplier of John Deere conversions and used equipment. Smith Falls, Ontario; toll free 800-325-7929 or 613-283-4001. www.afmi.ca

Aspen Equipment – new Bombardier groomers and used equipment. Upper Midwest USA: Bloomington, MN – 952-888-2525; Duluth, MN – 218-624-1111; Ankeny, IA – 515-965-1000; Omaha, NE – 402-894-9300. www.aspenequipment.com

ASV – manufacturer of Track Truck, DX, and Posi-Track vehicles. Grand Rapids, MN; toll free 800-346-5954 or 218-327-3434. www.asvi.com

Camoplast Industrial (formerly Bombardier Industrial) – manufacturer of Bombardier groomers. Headquarters – Granby, Quebec 450-776-3600; Northeast US and Canada – Granby, Quebec 612-759-0405; Western Canada – Calgary, Alberta 403-279-7271; Inter-Mountain US – Salt Lake City, UT 801-364-8266; Rocky Mountain US – Grand Junction, CO 970-242-7150; Far West US – Reno, NV 775-359-7517. www.industrial.camoplast.com

Charles Vogel Enterprises – manufacturer of Arrowhead Groomers and Ultra Arrow Track. St. Germain, WI; toll free 888-412-1722 or 715-479-4200. www.charlesvogelent.com/groomers

Cook's Equipment – Tucker Sno-Cat dealer, used equipment, and parts. Newport, VT; 802-334-7779. www.cooksequipment.com

Custom Snow Cat, Thiokol, DMC and LMC Parts – by machinist Pat Foster. Wallace, ID; 208-556-0153. <http://wallace-id.com/foster.html>

Ebert Welding – manufacturer of Sur-Trac Groomers. New Liskeard, Ontario; toll free 866-476-6899 or 705-647-6896. www.ebertwelding.com

Easy Pull Trail Groomer – pull behind snowmobile groomer. Two Harbors, MN; 218-834-2485. www.angelfire.com/biz/easypull/

Fall Line Corporation – aftermarket parts and drive sprocket recovering. Reno, NV; toll free 800-325-5463 or 775-827-6400. www.fallline.com

Hans-Hall – supplier for track belting, cleats, guides, and other parts. Murray, UT; 801-747-1110. www.hans-hall.com

HICO (Hydraulic Industries Corporation) – supplier of all types of snow groomer parts. Vaudreuil, Quebec; 450-424-5411. www.hico.ca

Institute for Snow Research – Michigan Technological University, Keweenaw Research Center; research on Snow Paver. Houghton, MI; 906-487-2750.
www.mtukrc.org

JACA – pull behind snowmobile grooming equipment. Jemseg, New Brunswick; 506-488-2075. www.jacatrax.com

LaCross Enterprises – manufacturer of LaCross Groomers and Front Blades. East Jordan, MI; 231-536-7142. www.lacrossgroomer.com

Lamtrac, Inc. – manufacturer of Lamtrac Groomers. Haut-Lameque, New Brunswick; toll free 888-526-8722 or 506-344-1130. www.lamtrac.com

Marcel Grooming Equipment – tractor conversion groomers and used equipment. New Liskeard, Ontario; 705-647-5444. www.marcelgrooming.com

Mattracks – rubber track conversion systems. Karlstad, MN; 218-436-7000.
www.mattracks.com

Maxey Manufacturing – manufacturer of Maxey drags. Fort Collins, CO; toll free 800-456-2939 or 970-482-1202. www.maxeymfg.com

Minnesota Outdoor Sports Specialties – used equipment. Brainerd, MN; 218-828-7876. www.mn-outdoors.com

Mohawk, Ltd. – dealer for Pisten Bully and used equipment. Chadwicks, NY; 315-737-5456. www.mohawkLtd.com

Mountain Grooming – manufacturer of Mtn. Snow Drag and dealer for Sur-Trac Groomers and used equipment. Waitsfield, VT; 802-496-3836.
<http://mountaingrooming.com>

Oak Creek Golf & Turf, Inc. – Pisten Bully dealer. Calgary, Alberta; toll free 888-773-7335 or 403-279-2907. www.oakcreekgolf.com

Okner's Supply Company, Inc. – replacement parts for snow groomers. Denver, CO; toll free 800-294-3579 or 303-294-9291. www.okners.com

Permagroomer Snowgrooming Products (Industrial Tires Limited) – custom urethane products for snow groomers. Mississauga, Ontario; toll free 800-668-4725 or 905-625-1600. www.industrialtires.com/products/permagroomer.html

Peterson Equipment – dealer for Pisten Bully and used equipment. Logan, UT – 435-752-5110 and Seattle, WA – 253-815-6899. www.petersonequipment.com

Pisten Bully / Kassbohrer All Terrain Vehicles – manufacturer of Pisten Bully grooming equipment. Offices: Grand Junction, CO 970-245-9331; Lewiston, ME – 207-777-7300; Burnsville, MN – 952-345-3330; Reno, NV – 775-857-5014.

www.katvpb.com

Ski Tech Products (Engineered Filtration, Inc.) – snow vehicle maintenance products supplier. Manchester, CT; 860-432-0248. www.skitech-products.com

Sno Boss Groomers (Olson Manufacturing, Inc.) – manufacturer of Sno Boss drags. St. Germain, WI; 715-479-3006.

Snow Country Groomers – dealer for Arrowhead drags, Arrow Trak, Marcel drags, tractor conversion kits, and used equipment. Lena, WI; 920-829-5196.

www.snowcountrygroomers.com

Snow Groomers.Net – manufacturer of Sno-Master pull behind snowmobile groomer. Harbor Springs, MI; toll free 800-430-7120 or 231-526-7120. www.snowgroomers.net

Snow Track, LLC – dealer for Sur-Trac grooming equipment. Wausau, WI; 715-675-7554. www.ebertwelding.com

Spooner Machine, Inc. – manufacturer of Spooner Drag. Spooner, WI; toll free 888-552-0835 or 715-635-3220. www.spoonermachine.com

Team Track – manufacturer of quad tractor conversion kits, front blades, and the Team Track Drag. Plessisville, Quebec; toll free 866-363-1688 or 819-362-2221.

www.go-track.com

The Resort Bone Yard – used grooming equipment. Chadwicks, NY; toll free 800-225-6642 ext. 265. www.resortboneyard.com

The Shop Industrial – manufacturer of Mogul Master drags and the TSI Compactor Bar; also dealer for Tucker Sno-Cat, Bombardier, Argo, and Centaur grooming equipment, as well as used equipment. Lively, Ontario; toll free 800-663-DRAG or 705-682-1522.

www.mogulmaster.ca

Track, Inc. – Tucker Sno-Cat dealer, used equipment, parts, and service. Bloomington, MN; 952-888-7372. www.trackinc.com

Tucker Sno-Cat Corporation – manufacturer of Tucker Sno-Cat groomers. Medford, OR; toll free 866-SNO-CAT1 or 541-779-3731. www.sno-cat.com

VMC Right Track, Inc. – manufacturer of VMC groomers. Lachine, Quebec; toll free 800-985-8665. www.vmcrighttrack.com

REFERENCES

Black Hills Snowmobile Program Operations Manual; South Dakota Department of Game, Fish & Parks – Division of Parks & Recreation. 2004.

California Snowmobile Trail Grooming; California Department of Parks and Recreation – Off-Highway Motor Vehicle Recreation Division. 1997.

California Trail Grooming Operator Certification and Training Handbook; California Dept. of Parks and Recreation – Off-Highway Motor Vehicle Rec. Division. Nov. 1999.

General Guidelines for Snowmobile Trails Grooming – Training Manual and Workbook; New York State Office of Parks, Recreation & Historic Preservation – Bureau of Marine & Recreational Vehicles. May 1999.

Groomer Operations Manual and Trail Signing Guide; Colorado State Parks and the Colorado Snowmobile Association. 2003.

Gullett, W. (Tony); Wyoming State Trails Program, personal communication – grooming equipment operation, practices, and tips. March 2005.

Lang, R.M.; The Physics of Snow and Snow Surface Preparation. May 2005.

Pisten Bully 100 Operating Manual; Kassbohrer All Terrain Vehicles. 2004.

Snowmobile Groomer Operator Awareness Program; New Hampshire Dept. of Resources and Economic Development, Div. of Parks and Recreation – Bureau of Trails. 2004.

Snowmobile Trail Development Manual – Chapter 6: Trail Grooming; Alberta Snowmobile Association. October 1999.

Snowmobile Trail Development Manual – Chapter 7: Trail Grooming; Ontario Federation of Snowmobile Clubs. 1996.

Snowmobile Trail Grooming Guidelines; New Hampshire Department of Resources and Economic Development, Division of Parks and Recreation – Bureau of Trails. November 2002.

Snowmobile Trail Grooming Handbook; Michigan Department of Natural Resources. September 2000.

The Shop Industrial – Mogul Master Multi-Blade Planer Operating Manual. 2001.

Wells, Chuck; Idaho Department of Parks and Recreation, personal communication – tillers. February 2005.

Wyoming Snowmobile Program Operating Manual; Wyoming Division of State Parks & Historic Sites – Trails Program. 2002.

Appendix:

SAMPLE FORMS

Several sample forms are provided in this Appendix to help grooming managers and operators with the important task of record keeping. Every form has a specific purpose, although not every example may be pertinent to every area. The samples should be used by grooming managers to build a form that best fits their area and needs. The following sample forms are included in this Appendix:

- Weekly Grooming Schedule
- Daily Grooming Log
- Vehicle/Equipment Report
- Monthly Maintenance Records (can be copied on back side of Vehicle Report)
- Grooming Equipment Maintenance Requests
- Corrective Action Request
- Groomer Operator Training Record

DAILY GROOMING LOG

Date _____ Area _____ Operator _____

Sequence of Trails Groomed _____

Tractor _____ Implements _____ Width _____

Operator's Time: In _____ Out _____ Total Operator Hours _____

Odometer Begin _____ Odometer End _____ Total Miles Groomed _____

Hour Meter Begin _____ Hour Meter End _____ Total Tractor Hours _____

Temperature Range _____ Inches of New Snow _____ Traffic _____

Weather (circle all that apply): Clear Cloudy Sunny Windy Snowing Raining Other: _____

Remarks: _____

Pre-Shift Check List (Warm Up tractor for a minimum of 10 minutes)

Fuel Tank Full _____ amt. added Belts Gauges Track Grousers
 Engine Oil _____ amt. added Lights Wipers Track Belts
 Hydraulic Oil _____ amt. added Battery Mirrors Track Tension
 Anti-Freeze _____ amt. added Beacon Radio/Phone Track Wheels
 Wiper Fluid _____ amt. added Tools Shovel Hydraulic Hoses
 Fire Extinguisher Ice Scraper Flashlight Implements Survival Gear

Checked Out By: _____

End of Shift / Shut-Down Checklist (Idle tractor for a minimum of 10 minutes)

Fill Fuel Tank _____ amt. added Water Separator Checked Shoveled Off
 Implements in Down Position Brake On Plugged In Key Off
 Radio/Phone Off Maintenance Needs Recorded Daily Log Completed

Average Gauge Readings During Run: Engine RPM _____ Engine Temperature _____

Oil Pressure _____ Hydraulic Temperature _____

Checked In By: _____

Special Notes, General Comments, Repair Work Needed, Explain Any Downtime, etc. in space below:

VEHICLE & EQUIPMENT REPORT

Report Month/Year _____ Vehicle/Equipment Description _____
 Make _____ Model _____ Year _____ Unit # _____

DATE	OPERATOR	GALLONS OF FUEL	BEGIN HOURS	END HOURS	DESCRIPTION OF ACTIVITIES
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
31					
Totals:	Gallons of Fuel:		Hours:		

VEHICLE/EQUIPMENT MONTHLY MAINTENANCE RECORDS – record dates, quantity, costs

Engine Oil: Change & Add						
ATF						
Grease & Lube						
Anti-Freeze						
Washer Fluid						
	Fluids – Total Cost \$:					
Oil Filter						
Transmission Filter						
Air Filter Cleaned						
Air Filter Replaced						
Fuel Filter						
	Filters – Total Cost \$:					
Axle						
Bearing/set						
Washers	Small		Large			
Bogie Wheel – small						
Bogie Wheel – large						
Ice Breaker Wheel						
Drive Sprocket						
Track Belt						
Track Cleat						
Tightner Bolt						
Track Bolts						
Connector Bolts						
Spring Bolt						
	Tracks – Total Cost \$:					
Tie Rod Ends						
Trunion						
Nylon Block	Small		Large			
Drive Shaft & U-Joints						
	Steering and Drive Train – Total Cost \$:					
Water Pump						
Thermostat						
Alternator						
	Engine Components – Total Cost \$:					
Lights	Flood		Spot			
Strobe Light						
Switch						
Wipers & Blades						
Transmission Heater						
Battery						
	Electrical – Total Cost \$:					
Hydraulic Pump						
Hoses & Fittings						
	Hydraulics – Total Cost \$:					
Major Service/Overhaul						Cost \$
Other						Cost \$
Labor						Cost \$
	Total Monthly Maintenance Cost:					

GROOMING EQUIPMENT MAINTENANCE REQUESTS

Equipment Name/#: _____ Date: _____ Requested By: _____

Hour Meter Reading at time of Request _____ Odometer Reading at time of Request _____

ITEM	OK	NO	COMMENTS	ITEM	OK	NO	COMMENTS
Fuel				Steering			
Motor Oil				Brakes			
Hydraulic Oil				Controls			
Transmission Fluid				Heater/AC			
Anti-Freeze				Mirrors			
Washer Fluid				Wipers			
Brake Fluid				Controls			
Hydraulics				Beacon			
Transmission				Backup Alarm			
Rear End				Windows			
Tracks/Tires				Engine Temperature			
Front Blade				Hydraulic Temperature			
Drive Belts				Transmission Temperature			
Alternator				Gauges			
Hoses				Radio/Phone			
Exhaust				Air Filter			
Leaks				Horn			
Loose Bolts				SMV Sign			
Loose Objects				Cab Interior			
Teeth/Edges				Remove Snow/Ice			
Linkage/Tie Rods				Shovel			
Hinge Pins				Fire Extinguisher			
Hitch				First Aid & Survival Kits			
Lights				Tools, Tow Ropes, Etc.			
Seat Belts				Other			

CORRECTIVE ACTION REQUEST

PART 1 – Condition Needing Attention:

Location:

Recommended Action:

Reported By: _____ Date: _____

PART 2 – Corrective Action Taken:

Verified By:

Date:

GROOMER OPERATOR TRAINING RECORD

Operator's Name _____ Date _____

Trainer _____ Equipment Certified _____

Signature of Operator – Acknowledgement of Training _____

Introduction to Grooming	√	Equipment Operation	√
Glossary of Terms		Operator Safety	
Grooming Objectives		General Operating Guidelines	
Grooming Principles		Grooming Basics	
Grooming Practices		Effective Grooming Tips / Drag	
Basic Snow Mechanics		Operating Tracked Vehicles Tips	
Grooming Manager		Tips to Avoid Equipment Damage	
Grooming Schedules		10 Common Operator Abuses	
Source of Funding		Front Blade Tips	
Grooming Equipment Features	√	Equipment Maintenance	√
General Overview of Tractors		4 Elements of Prevent. Maintenance	
Tractor Components		1 st Time Operation of New Unit	
Tractor Characteristics		Pre-Season Inspection & Maintenance	
Front Blades		Pre-Operation/Shift Inspection	
General Overview of Implements		Post-Operation/Shift Inspection	
Grooming Drag Features		Regularly Scheduled Maintenance	
Tillers		Off-Season Storage	
Compactor Bars			
Snowmobiles as Groomers			
		Record Keeping	√
		All Required Logs & Reports	
Local Issues	√	Vehicle Check-Out Run	√
Trails Routes & Maps		In-Cab Instruments & Gauges	
Signing Guidelines		Backing & Hooking Up Implement	
Special Closures or Sensitive Areas		Start and Stop	
Local Laws		Operation on Right Side of Trail	
Emergency Procedures		Front Blade Operation	
		Implement Operation	
		Fueling	
		Pre & Post Visual Inspection	