Journey/Travel Management Training Program
Introduction –

All-Can Engineering & Surveys (1976) Ltd. is involved in operations that span the entire province of Alberta. Transportation is an integral part of our business, especially amongst the field crews. It is also one of the biggest hazards we face in our day to day operations.

All-Can’s Journey Management Plan (JMP) is a safety measure to help avoid accident/injury resulting from transportation. The objective of the JMP is to ultimately eliminate driving related accidents that cause fatalities and injuries to employees, contractors and third parties and minimize damage to equipment through careful management of all phases of the transportation process.

The result of this JMP training program is to have our staff better prepared to safely deal with unplanned events/circumstances during routine trips that may occur. This includes:

- Identifying and managing hazards and unnecessary exposure through active journey management
- Preventing and mitigating the risk through the proper selection and preparation of people, vehicles, equipment and routes.

Journey Management Procedure –

There are 3 stages in the JMP: Preparation, Implementation, and Follow Up.

**Preparation** – This is the planning stage of the journey and is the most important aspect of the JMP. Most accidents and injuries are avoidable, and in the case that an accident/injury does occur, proper planning will provide a means of effectively dealing with the situation and lessening the severity.

Typically the survey crew consists of the party chief (PC) and survey assistant (SA) driving a truck loaded with quads/sleds and survey equipment. The crew should be well equipped with fuel, maps, GPS receivers, first-aid/emergency rations, and functioning communication equipment. A brief inventory of the equipment and an inspection of the truck (i.e. tires, quads strapped down, etc.) must always be done pre-trip.

It is essential that the PC, with the help of the SA, determine the logistics of the trip before leaving. A number of details should be addressed in a pre-trip meeting including:

- destination
- routes (preferred and alternates)
- weather conditions
- timing considerations
- communications devices & emergency contacts
- emergency response procedures

When working on jobs requiring similar procedures on a day to day basis, pre-trip meetings should be done in accordance with the daily tailgate meetings. During these meetings, all potential journey risks
should be assessed and steps to mitigate these risks should be outlined. The pre-trip meeting should
determine whether a trip is routine or non-routine, as this will affect the degree of preparation required.

**Routine Trip:** Routine trips are the most common trips we make as surveyors, and are also the lowest risk. They involve travel within a pre-determined locale such as a plant site, to and from hotel to a job site, trips around town/city. Typically a routine trip will not involve the use of maps or GPS, and will not subject the crew to any unforeseeable hazards.

**Non-routine Trip:** Non-routine trips involve travel outside of a pre-determined locale and pose a significantly higher risk. Trips are identified as non-routine in the pre-trip meeting and can involve any number of escalating factors. Some examples of escalating factors are:

- weather conditions
- fog or smoke
- mud, snow and ice
- cross winds/ blowing snow
- night driving
- forestry roads/ one way traffic
- low angle sun
- deterioration of road surface
- wild life
- fatigue
- windshield condition/visibility
- road closures or accidents

Fatigue – Fatigued driving is essentially impaired driving. It slows reaction time, decreases awareness and impairs judgement. Be sure to assess your fatigue level prior to departing on a trip. DO NOT DRIVE IF YOU ARE TIRED. For more information refer to the “Fatigue Management” Section of the Safety Manual.

**Implementation** – This is the actual travel stage of the journey. Crews must be diligent in sticking to the guidelines set forth in the preparation stage. In the case that an unexpected situation arises, the crew should re-evaluate their plan accordingly.

When departing on a journey, the crew chief must activate their SPOT Messenger system. Upon safe arrival at the end of the day (at hotel or home) the crew chief must deactivate their SPOT Messenger. This is a new safety device being used throughout the industry that allows for emergency communication and indicates the users position from anywhere in the province. It also has the ability to automatically broadcast its position every 10 minutes so if the user needs help or requires emergency assistance the route they took to their location can be provided to those going to offer assistance (e.g., another survey crew if help is required or search and rescue in an emergency situation). For more information refer to Appendix B: SPOT Messenger Information Sheet.
When driving, whether by truck or quad, all rules and safe procedures must be followed. The Off Highway Defensive Driving booklet contains many valuable driving strategies which are outlined in Appendix A.

There a few golden rules to abide by in case of an emergency:

1) If you have broken down or become hurt in a remote area several kilometres from any settlement – Do not leave the vehicle. Call for help and remain at your geographic location.

2) Refer to the Emergency Response Plan for a list of emergency phone numbers in your area.

3) Always carry a handheld GPS or similar device in the vehicle so your location can be related to others. Both the PC and SA must know the exact location and be able to readily relate this information.

4) Communication with the field crew manager at the head office is essential. Always provide details of the accident as quickly as possible. Elapsed time tends to cause errors with respect to memory of the incident.

5) Agree on a check-in schedule for the duration of the trip with the field crew manager.

6) If working alone, ensure that the location (e.g. GPS coordinates) of you and your vehicle are known to those responsible for you during your trip.

7) If you change your directions from pre-planned routes you need to communicate the new plan to the field crew manager.

8) Remember if you cannot do the task in a safe manner then stop, evaluate the risk and find a method to control the hazard.

Follow Up – The follow up procedure is the final step in the JMP. If all goes well then there should be little follow up to be done. The party chief should ensure that upon safe arrival they deactivate the SPOT Messenger. Notes can also be made in regards to any near misses or potential hazards and how they were avoided.

In the case that an accident/injury does occur, we must ensure a thorough follow up investigation is done. The purpose of this is to address where things went wrong and how this accident/injury could be avoided in the future. This investigation would involve the PC, SA, field crew manager and any other parties affected.

Conclusion

Journey management involves knowing what is involved in a trip; it is really a record of a complete planning process. Our JMP is about taking the time to develop a plan of attack and prepare for any potential diversions along the way, and making sure we arrive home safely every day.

Refer to Appendix B for instructions regarding the SPOT Messengers; these will be put into effect in accordance with the Journey Management Plan.
Appendix A – Off Highway Defensive Driving Strategy

1) Plan Your Trip
   - Select a Route
   - Identify road conditions
   - Identify weather conditions
   - Advise others of your destination, route and ETA

2) Conduct Pre-Trip Inspections
   - Inspect vehicle operating condition
   - Inspect basic vehicle equipment
   - Inspect safety equipment
   - Inspect survival equipment

3) Recognize and Anticipate Hazards
   - Identify road hazards
   - Identify adverse driving conditions

4) Reduce Speed
   - Less traction then paved highways
   - Greater limitations in road design
   - Inconsistent road surfaces

5) Drive Defensively
   - Demonstrate a good driving attitude
   - Use road courtesy
   - Follow traffic laws and regulations
   - Maintain communications
Appendix B – SPOT Messengers

All-Can Engineering & Surveys (1976) Ltd has adopted these devices for our field crews as a safety device for emergency location. This device uses GPS to determine your position and a geostationary satellite for communication and will need an unobstructed view of the sky, particularly the southern sky, to function properly. Your location or message can be relayed to an email address or cell phone. In an extreme life threatening emergency, the 911 button can be used to notify the GEOS International Emergency Response Centre of your exact coordinates. We are also hoping to eventually allow the user to see their position on an internet based mapping system to aid them in navigating.

The SPOT Messenger operates on 2 AA Lithium batteries that are already installed. You should find four spare batteries included in this package. A pair of lithium batteries should last at least a month of continuous daily usage – longer if on holidays or away from work. Use only Lithium batteries in your messenger.

Procedures –

The SPOT Messengers are a safety measure for crews that will allow the field crew manager and safety manager to know the crews location and the route they travelled to that location. This will allow travel to the field crews location in the case of an emergency or if the crew needs assistance. It will also allow the crew to automatically and quickly notify the Field Crew Manager at the beginning of the day indicating they are heading to the job site and at the end of the day indicating they have safely returned. It does NOT replace good communication between the field crew and the field crew manager.

The SPOT Messenger should accompany the crew throughout their duties. It should be mounted on the dashboard of the truck when travelling, and mounted to the quad when away from the truck.

The following procedures are to be followed:

To turn **ON** the SPOT Messenger:

Press and release the ON/OFF button. While on, the light will flash every three seconds. The first time you turn on the SPOT or if you have moved more than 1000 km, it will take about 4 minutes to determine coordinates. The receiver is behind the SPOT logo on the front of the unit. This receiver needs to have a clear view of the sky, especially during initialization.

To turn **OFF** the SPOT Messenger:

Press and hold the ON/OFF button for 3 seconds. The lights will cease to flash. It is off.
Activate **SPOTcasting Mode:**

**This feature must be activated at the beginning and end of each day.** This mode will update your position every 10 minutes for up to 24 hours. Your approximate route will then be available should you require assistance.

Press and hold the OK√ button for more than 5 seconds. Once activated, the OK√ indicator light will blink green every 3 seconds, and turn solid green for 5 seconds when a SPOTcasting message is being sent. SPOTcheck must be inactive for SPOTcasting to be activated.

To disable SPOTcasting mode press and hold the OK button for 5 seconds or you can turn the unit off.

Checking **IN/OUT (SPOTchecking)** when working alone:

**When working alone, this feature must be used to check in at the beginning of the day and check out when you have returned safely at the end of the day.** Press the OK√ button. This will send a message to the field crew manager with your location and a note saying you are OK. The indicator light will blink green every 3 seconds and solid green for 5 seconds when sending a message. The SPOTchecking mode will broadcast 3 messages over the course of 20 minutes (for reliability), however only one message will be received by the field crew manager. Thus when checking in/out ensure you allow sufficient time for SPOT to broadcast the message.

You cannot cancel a SPOTcheck message, but you can stop any unsent SPOTcheck messages by turning off the messenger at any time. Unsent SPOTcheck messages are automatically disabled when you activate either 911 or HELP.

To activate **HELP Mode:**

Press and hold the HELP button for 2 seconds. This will send a message to both the field crew and safety manager’s cell phones, as well post a message to spot@all-can.com with your exact location. Once activated, the indicator light will blink green every 3 seconds and turn solid green for 5 seconds when a message is being sent. SPOT will determine your coordinates and send a message every 5 minutes for 1 hour in this mode.

Upon receiving a HELP message, the field crew manager or safety manager will call the crew that requested help (in case help was requested accidentally). If they cannot be contacted the client field consultant and / or the closest All-Can crew to the area that can respond to the request will be contacted and dispatched to the area. Emergency services will **not** be contacted when the HELP mode is activated.
Use this mode in the event of a **non-life threatening emergency**. This should be used as a last resort when all other means of communication fail. (i.e. cell/satellite phone not available, too far to walk to safety, nobody in area will be able to help). A few examples are:

- Your truck has broken down and you are out of range for cell phone use.
- It is cold and you have lost your truck keys, and you are too far to walk for help.

To activate **911 Mode**:

Press and hold the 911 button for at least 2 seconds. A distress signal and your exact location will be sent to an Emergency Response Centre every 5 minutes until cancelled. To cancel this mode: Press and hold the 911 button for at least 3 seconds.

Use this function in the event of a **life threatening or other critical emergency** to notify emergency services of your exact location and that you need assistance. The Emergency Response Center notifies the appropriate emergency responders based on your location and personal information - which may include local police, highway patrol, or other emergency response or search & rescue teams - as well as contact the field crew manager and safety manager. In this mode even if SPOT cannot acquire its location form the GPS network, it will still attempt to send a distress signal (without exact location) to the Emergency Response Center. Keep in mind that there is no test mode. If you activate the 911 function, the Emergency Response Center will treat it as a real emergency.

Again, use your discretion in deciding whether this is the best option; only use if you are out of cell/radio range and cannot actually call 911 (or other emergency contacts) for help.

**Please make sure you read and understand the operations manual included with your SPOT Messenger, as the above is just a brief reference of the operations of the messenger.**