MEETING SUMMARY
Unconventional Vehicles Working Group

Date of Meeting: September 20-21, 2011
Summary Prepared By: Denise Hanchulak
Location: Quebec City, Quebec
Agenda: Can be found at the end of this meeting summary.

1. Meeting Overview

The primary purpose of this meeting was to discuss the two projects that were currently on the table, (converting vehicles from gas power to electric power and homemade, imported, merged and amalgamated vehicles) and discuss the direction in which the unconventional vehicle working group would like to go with them.

2. Attendance at Meeting

<table>
<thead>
<tr>
<th>Name</th>
<th>Jurisdiction</th>
<th>Invited</th>
<th>Attended</th>
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<tbody>
<tr>
<td>Mark Francis</td>
<td>British Columbia</td>
<td>Yes</td>
<td>Yes</td>
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<tr>
<td>Cindy Gerber</td>
<td>South Dakota</td>
<td>Yes</td>
<td>Yes</td>
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<tr>
<td>Craig Root</td>
<td>California</td>
<td>Yes</td>
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<td>Denis Boissonault</td>
<td>Alberta</td>
<td>Yes</td>
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<td>Douglas Hooper</td>
<td>Georgia</td>
<td>Yes</td>
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<td>Harold Blaney</td>
<td>Quebec</td>
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<td>Lori Bowman</td>
<td>Oregon</td>
<td>Yes</td>
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<td>Shelly Mellott</td>
<td>Alaska</td>
<td>Yes</td>
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<td>Monica Blackwell</td>
<td>Texas</td>
<td>Yes</td>
<td>No</td>
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<td>Paul Nilsen</td>
<td>Wisconsin</td>
<td>Yes</td>
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<tr>
<td>Rob Termuende</td>
<td>British Columbia</td>
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<td>Scott Clapper</td>
<td>Delaware</td>
<td>Yes</td>
<td>Yes</td>
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<td>Heather Gorman</td>
<td>New Brunswick</td>
<td>Yes</td>
<td>Yes</td>
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<tr>
<td>Denise Hanchulak</td>
<td>AAMVA</td>
<td>Yes</td>
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3. Action items

1. Denise will prepare and distribute a summary of the meeting
2. Is fuel type coded in the VIN, what do they do for hybrids or plug in hybrids? (flex fuel)
3. Need to do a survey to find out at what point, if any, do electric conversion vehicles become dangerous? How much electricity is required to operate such a vehicle? Is there an actual shock risk and concern for first responders?
4. Are there any jurisdictions using special coding on police accident reports for hybrids, electric, conversion vehicles?
5. Is there emergency room data available that would document any issues with electrical shocks?
6. Look at the International community (outside of Canada/USA) to see how they deal with conversion vehicles.
7. Has any jurisdiction put in place a noise requirement for electric, hybrid, etc., vehicles?
8. Does the Insurance Institute of Highway Safety look at conversion vehicles?
9. Denise will look into if AAMVA ever had a Vehicle Branding Working Group.
10. Summarize what is happening with newly manufactured versions of classic vehicles, such as the 1932 Ford Roadster rebodied vehicles and come up with recommendations on how a jurisdiction should be handling them. Need to be consistent in how we deal with these.
11. Denise will reach out to the membership to see if anyone has adopted the best practices on mini trucks that were developed.
12. Delaware will send AK their definition of a recreational vehicle.
13. Poll the jurisdictions annually or semi annually on any new or emerging vehicle issues.
14. Look at how jurisdictions are dealing with the road tax and road fees issue.
15. Who are the key stakeholders with an interest in electric vehicle conversions from industry, government and other agencies and associations?

4. Meeting Notes, Decisions, Issues

- Chairman Mark Francis welcomed attendees to Quebec City and thanked them for their continued support and efforts.
- The working group held an extensive discussion regarding the subgroups and decided to combine the subcommittees for the better part of the day. Towards the end of the day the group would split up into their respective group and discuss the objectives and goals of their specific groups.

The first item of discussion was the converting of vehicles from gas power to electric power. Rob Termuende and his staff put together a paper containing background, Electric Vehicle Conversion 101, Key Questions, Action Plan and Phase.

- A copy of the paper has been attached.
4. Meeting Notes, Decisions, Issues

- Extensive discussion was also given to the data you can get from the VIN (VIN validation).

What type of information can you get from running the VIN and what companies are out there that sell an off the shelf product that can pre populate the year, make, model from the VIN. Oregon and QC are using R.L. Polk and they are able to pre populate the vehicle records. WI was also able to get additional information from the VIN. If you contact the company and tell them what you need, they should be able to work with you, but if your looking for additional information they will need to tweak it to meet your needs. You may not be able to get an off the shelf vehicle value package. FAST is developing one, they do tax systems.

NHTSA has the Code of Federal Regulations; there is Black Book, NICB and NADA, etc.

Would like to see electronic MCOs/NVIS’. If you get a VIN electronically, you may be able to get more from it and there is less room for error when it is being put in the system.

- BC is having a problem with vehicles being manufactured to certain era-specific vehicles, such as a 1932 Ford Roadster. They break it down, keeping the frame (which contains the serial number) or just a portion of it, and some other components, but use a newly manufactured replica steel body and modern power train. You can’t differentiate between a real or “re-bodied” 1932 Roadster. Also, depending on how they are registered it can seriously impact the vehicle’s value. The vehicle is basically built from scratch by using multiple manufacturers. How are other jurisdictions handling this and how should a jurisdiction title/register it?

- Oklahoma brands them and registers them as a re-bodied 1932 Ford Roadster. BC puts it in as a Model Ford. OR will title it as a replica (rebuilt to look like another vehicle)

Some jurisdictions have very limited branding, so how it is described in the make and model field is very important. Need to look at giving it a distinguishing mark, etc., on the registration. BC registers with Ubilt as the model, and make is Ford.
4. Meeting Notes, Decisions, Issues

- The working group discussed the two subcommittees at length and then asked for volunteers to help do the research in identifying and outlining what comes next. Below is a breakdown of the two subcommittees.

**Group 1:** Converting vehicles from gas to electric. Rob, Scott, Cindy, Paul, Doug and Craig.

The group decided to not get into developing best practices on converting or engineering, because they were not the experts. They want to limit themselves to labeling, registering and safety concerns. Need to find out if there is a reason for jurisdictions to know if the vehicle is electric or gas. Need to look to see if there are any markings, registry data, etc., available. Has any other agency looked into this and is there a reason that they should be identified.

Key Questions:

1. What current inspection and enforcement practices are used by jurisdictions? What are the gaps?
2. What is the scale of electric vehicle conversion in Canada and the US? Is their data available related to the number of vehicles that are converted from gasoline to electric? Is this a statistic that jurisdictions track and monitor?
3. What are some key risks and safety concerns related to operation of converted electric vehicles on highways?
4. Would your jurisdiction have the ability to track the conversion vehicles?
5. Which jurisdictions have to use specific standards for inspections of converted electric vehicles?
6. What current studies and initiatives are under way regarding standards, regulations and best practices for electric vehicle conversion?
7. Is there an issue in your jurisdiction regarding noise generation from hybrids for the hearing impaired?
8. Do jurisdictions have the ability to track crash data on specific vehicles?

The group would like to explore people with visual disabilities, if there is a standard on the deferral level on noise production for electric/hybrid vehicles? Are there any penalties for declaring your vehicle is electric even if it isn’t? Should the vehicle title be rebranded after conversion, especially if the drive train is changed?

- **Action Plan**
  - Survey of AAMVA jurisdictions regarding current practices for registration and regulation of electric vehicles.
  - Conduct a best practice review.
  - Stakeholder identification and consultations.
  - Identify key risks and issues. (The group had some safety concerns: the potential for battery acid spillage and or electrocution.)
  - Explore if there is a federal standard on noise generation for electric cars.

- **Phase 2**
  - If jurisdictions believe there is a need for better standards and regulations of electric vehicle conversions, the group will need to:
    - Develop best practices for registering (with respect to inspections).
    - Development of educational materials and job aids for jurisdictions, customers, enforcement and safety responders.

Scott will look at the engineering side
Paul will look at the safety side
Rob will look at developing a survey – survey will be distributed to the group in about two weeks, the group will have one week to send back their comments.
4. Meeting Notes, Decisions, Issues

- **Group 2**: Homemade (a.k.a Ubilt), imported, merged and amalgamated vehicles. Mark, Heather, Shelly, Lori, Monica, Paul and Harold.

Homemade Vehicles: Need to develop a scope, outline why it is not being discussed at the federal level and why it is being tackled at the jurisdiction level. Need to research and come up with recommendations. Look at a universal identifier.

Re-bodied vehicles using licensed parts. Built to resemble a previous vehicle. Look at creating elements/components for “vehicles the Federal Government does not address”.

Plan to do a specific survey on 4 or 5 vehicle types and see how jurisdictions treat them and what type of document they would then create. Look at filling out some states registration forms and submitting them as the survey questions. How much information you provide may shape their response. Will look at the key elements of the application. Need to use a simple example so they can tell you what they would do. Look at providing them a picture or bill of sale. Ask if they inspect the vehicle? How would they register the vehicle? How would they brand the vehicle? Provide the state a concrete real example and see what you get back.

Paul: when a vehicle passes through a jurisdiction and has a conforming VIN, look at creating a universal brand or trigger notice that the vehicle may not be what it actually is.

- Their goal is to work towards a set of recommendations or best practices.
4. Meeting Notes, Decisions, Issues

- **Roundtable Discussions:**

  **Oregon** – Off road vehicles cannot be registered for on road use, but must be registered for off-road use by Oregon State Parks Department if operated on public land. DMV will optionally title ATVs. If a person claims their off-road vehicle has been modified for on-road use, the applicant must present an original letter from the manufacturer indicating the vehicle is capable of being modified to meet federal safety equipment and EPA standards for on road use. No one has been able to provide the letter up to this point.

  **British Columbia** – Converting a vehicle will get you out of having to get an emissions test. They are working with manufacturers on clarity of NVIS (MCO). Began work on implementing a mandatory registry for off road vehicles, but they ran into some funding and prioritization issues. Currently, for the large majority of vehicles if it touches pavement, it has to be registered. Look for an off the shelf vehicle package. Over the last year they have let up on some of their strict rules and exempted specialty vehicles from registration; ie, golf carts, parade vehicles, small utility type vehicles used in industry.

  BC had a problem with power assisted bikes, there is a Chinese manufacturer making the bikes with pedals that worked but aren't used. They are exempt from registration because the are 500 watts or less with working pedals. They are a perceived harm but they can't seem to show that they are a problem.

  Going through a strategic planning session right now and are looking at ongoing revenue/fees from environmental friendly vehicles.

  Still having the same concerns with mini trucks, they are still permitted as long as they pass inspection. Canadian jurisdictions are pressing for increased federal regulation. Pocket bikes have been banned from being registered and highway use.

  **Delaware** – Have a good working relationship with legislature. They really aren't seeing any new vehicle trends at the moment.

  **Georgia** – going to do an RFI to what off the shelf vehicle packages are available. Looking for a full range registration program.

  **California** – No new or big issues at this point.

  **Alaska** – There is a bill in legislation that will reduce registration rates for new vehicles. Emissions will be going away in August. They have an off road registry, but it is optional. It has helped with thefts. AK is in the process of mapping right now. DPS just had a modernization so it helps that they are able to mirror theirs. An RFP is out. Problem with people converting semi trucks to motor homes to avoid commercial DL and higher registration fees. Delaware will send AK their definition of a recreational vehicle.

  Will only register mini trucks for off highway use.

  **New Brunswick** –Does not allow low speed vehicles. If you converted a vehicle from gas to electric, it would have to be inspected by a vehicle engineer. Registration of off road vehicles is mandatory. They allow forklifts to be registered now for incidental use. They keep the original factory serial numbers and most of them have non standard VINS. It prevents them from having multiple records.

  If the vehicle does not meet FMVSS standards they are banned.

  **South Dakota** – any vehicle on the highway has to be registered and insured.

  **Wisconsin** – has an off road registry, that is under the Department of Natural Resources. Highway crossings are allowable as long as you stay off payment. Registration is mandatory.
4. Meeting Notes, Decisions, Issues

Quebec – A new ministerial order prohibiting the use of right-hand drive vehicles on the road network came into effect. There are still around three thousand still on the road. Having a problem with power assisted bicycles. Developing procedures on differentiating between the two types (limited speed motorcycle/electric bicycle). Limited speed motorcycles are not registered and they are endangering bicyclists on the bike paths. They currently have the managers of the bike paths gathering information to see how to proceed. In Europe they are limited in motor size.

There was a question on if on demand print saves money? With on demand print there is less theft and loss. Costs go down and you are able to pass the paper cost down to the county. Look at using a color template and print overlay.

- Other items for discussion:

  North Dakota asked if the UVWG developed a manual with standard definitions on vehicle types? Mark said CCMTA produced standard vehicle definition types and he would pass on.

  If a vehicle does not meet US or Canadian standards, it is considered unconventional. The vehicle cannot be modified or changed. NHTSA has a list of foreign vehicles being substantially similar.

- OR asked if jurisdictions are looking at lost revenue issues for gas taxes with the advent of alternative fuel vehicles. OR is looking at possible legislation to find an alternative to gas taxes.

  GA has a fee for all alternative fuel vehicles to compensate for the lost gas taxes.

- Next steps / Wrap up:

  - Develop formalized work plan with deliverables and milestones for the two sub-groups.
  - Set up conference call for each group within the next month.
  - Beginning of November set up conference call for entire group.
  - Look for location and meeting date for next face to face meeting.
  - Produce meeting minutes to Chair within the next two to three weeks for review and comment.

5. Next Meeting

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September 20, 2011

• 8:00am – 8:30am Breakfast

• 8:30am – 9:00am Welcome/Introductions
  o Welcome new working group members:
    ▪ Shelly Mellott, AK
    ▪ Heather Gorman, NB

• 9:00am – 9:15am Roll call / Agenda Review

• 9:15am – 9:30am Review of past meeting minutes
  o May 26, 2011

• 9:30am – 10:00am Discuss Subcommittee approach and validate objectives

• 10:00am – 10:15am Break

• 10:15am – 12noon Break into Subcommittees
  o Develop goals and deliverables for converting vehicles from gas power to electric power.
  o Develop goals and deliverable for homemade, imported, merged, and amalgamated vehicles.

• 12pm – 1:00pm Lunch

• 1:00pm – 3:00pm Continue Subcommittees

• 3:00pm – 3:15pm Break

• 3:15 – 4:30pm Continue Subcommittees (adjourn for the day)
September 21, 2011

- 8:00am – 8:30am **Breakfast**

- 8:30am – 10:00am **Working Group Convenes**
  - Subcommittee reports/discussions

- 10:00am – 10:15am **Break**

- 10:15am – noon **Subcommittee Reconvenes**
  - Assignment of task
  - Expected deliverables/outcomes

- **Discuss how jurisdictions are handling snowmobiles converted into motorcycles**

- **Open discussion**

- **Closing comments/Next steps**

- **Adjourn!**