**IEEE Systems Council**

**Intelligent Transportation Design Technical Committee**

**Stand-up Meeting – 2/11/16, 9p, Eastern**

**Agenda**

1. **Attendees**
2. **Intelligent Transportation Design Technical Committee**
3. **7 goals**

Attendees:

1. Attendees: LaMont McAliley, Ophir Kendler, Masoumeh Esfandiari

Intelligent Transportation Design Technical Committee

Intelligent Transportation Design will capture the essence of machine-enabled human and payload transportation through all modes of travel. Issues associated with the safe implementation of complex systems supporting autonomous and semi-autonomous transport will be identified, predicted, and their mitigation strategies will be recommended. Particular attention will be paid to the power processes, internal and external electronics, system architecture, system safety, reliable/robust design, and the material integrity of electromechanical systems.

7 goals

* Unmanned Aircraft Systems (Ophir Kendler)
* Ground Transportation Implementation Planning (LaMont McAliley)
* Electric Aircraft (KoteswaraRao Tatipamula)
* Space Access (Roger Oliva)
* Rail (KoteswaraRao Tatipamula)
* Sea (Roger Oliva)
* Air (Roger Oliva)

Template for the 7 goals

1. **OBJECTIVES:**  Create trade-space by articulating objectives that support the Goal stated above for each of the 7.  This would be “the” list of (sub-goal) objectives (these would be capabilities).  Most of the objectives should be technical in nature but all must be measurable.  For each of the objectives, be sure to cover the following:
   1. Scientific breakthroughs required or being pursued to meet the goal.
   2. Identify work-around(s) that will assure goals are met until optimal solutions are realized.
2. **METRICS:**  Once the objectives required to meet the goal are listed, establish suitable metrics for each one.  Metrics should be characterized with enough fidelity that when proposed solutions for the objective are submitted and “rated” it is clear whether the various objectives are being met by the proposed solution.  In most cases, several metrics will be required for each objective.
3. **DECISION SPACE:**  Next, create a set of recommended solutions for each objective.  For a particular solution, the objectives are summarized by the metrics such that it is clear that it is in good shape (green), needs work (yellow), or currently not being met (red).
4. **ANALYSIS:**  Evaluate the solutions.  If the metrics were actually suitable, it should be obvious where the issues are.  Perform appropriate risk analysis, identify workforce development issues, establish short-list of technical hurdles, and summarize the pros and cons for each solution.
5. **RECOMMENDATIONS:**  Create a set of recommendations that identify the best path forward to meet the particular goal/set of objectives being addressed.  The recommendations will summarize the status based on Current; anticipated Short Term (5 years); anticipated Far Term (10 years); Focus/Assumptions; maybe some Proposed Working Groups; a draft Roadmap & Timeline.

Discussed the goals identified above. LaMont has been in touch with the Intelligent Transportation Society of America (ITSA) in regards to Ground Transportation Implementation Planning. LaMont will send out a one pager on the Ground Transportation Implementation Planning prior to the next meeting.

Ophir provided an updated in regards to the Unmanned Aircraft System. Also provided a listing of upcoming conferences that would be of interest for our group.

Masoumeh would like to help out within the 7 goals. Masoumeh mentioned 3 goals, Space Access, Air and Sea are of interest. Masoumeh will reach out to Roger about helping on the 3 goals requested.

Discuss the upcoming Transportation Electrification Workshop planned in DC during the week of Feb.22.

Discussed the opportunity to develop a business plan or business model for reaching out to other organizations.

LaMont will send an Email out for days and times for the next meeting.

Action Items:

1. LaMont to send out one pager prior to the next meeting
2. Ophir Kendler to develop a business model or business plan.

Next Steps

1. Figure out what other organizations are currently involved in and see if there is any information that can be utilized.
2. Consider writing a 1 pager on all of the 7 Technical cases listed above and define the state of the art and the significance.
3. Reach out to the other societies within IEEE and other organizations afterwards (SAE, Standards, NIST, etc)