

Statement of Work: TD System Application and Enclosure

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### Overview

Dinamic Oil North America (DONA) is interested in adding a wireless user interface and data logging system, consisting of an electronics enclosure and an iOS and Android app as a compliment to its Torque Detection (TD) flange. The system would be a slightly modified version of the system that is currently being developed by Bravo Team for Pengo. The system would be largely identical, with the majority of the changes being removing certain features and modifying the cosmetics in order to reflect the Dinamic Oil brand. This Statement of Work (SOW) will define the alterations that would be required in order to convert the finished Pengo system into the proposed DONA system based on the current understanding of what the final Pengo system will look like.

# Current Progress of the Pengo System

Currently, Bravo Team and Pengo remain in the process of finalizing the app and enclosure for the Pengo system. DONA and Bravo Team would begin development of the DONA system upon completion of the Pengo system in order to avoid concurrent and possibly repetitive modifications of both systems. The requirements outlined in this SOW are based on the assumption that the final version of the Pengo system is similar to the proposed version detailed in the template and SOW created by Eric Matthias. Any changes should be communicated to DONA so that the requirements can be updated accordingly and work can be resumed seamlessly between the Pengo system and DONA system.

# Timeline

Currently, the Pengo system is expected to be complete by the end of 2019. At that point, work would begin to convert the Pengo system to the DONA system. DONA is planning on showing the proposed system at ConExpo in early March, 2020, so the app would need to be done by early February, leaving approximately five weeks for development.



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### Software

The app should function fully and uniformly on the iOS and Android platforms, just like the Pengo app upon its completion. It would be available on the Apple App Store and the Google Play Store. The majority of the changes proposed in this SOW are cosmetic in nature, such as changing colors and logos. The main user interface screen would be the most heavily modified aspect of the app.

#### User Interface Flow

The flow of the DONA app would be identical to the Pengo app. All of the different screens in the Pengo app would be present in the DONA app, and all buttons would have similar functionality.

### Page Layouts

The differences in the page layouts between the Pengo app and DONA app would primarily be in the colors and logos. The only page that would look significantly different is the main user interface. The changes are described in detail in the app conversion guide and template.

# **Generated Report**

Instead of PDF format, the DONA app should generate an Excel or csv file following the format described in the template. Similarly to the PDF report in the Pengo app, the file would be emailed from within the app.

#### **Enclosure**

The enclosure, including the PCB and rechargeable battery pack, would remain exactly the same as what will be designed for Pengo. If any graphics are added to the Pengo enclosure, then they would be removed and possibly replaced to reflect the Dinamic Oil brand.

# Weekly Updates

During the duration of the timeline for this project, weekly updates between DONA Bravo Team would be held over the phone or in person. This would ensure constant communication so that any potential issues are dealt with immediately. The most critical aspect of this project is having a finished product in time for ConExpo in early March.



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# **Deliverables**

All deliverables to Pengo should also be made available to DONA upon completion of the Pengo system, including electrical schematic for the enclosure, PCB schematics, enclosure drawings, enclosure bill of materials, calculations (if applicable), microcontroller code, software code, and any other relevant documents or information. In addition, all modified documents must be submitted upon completion of the DONA app, including updated schematics and code.

#### Production

For the DONA app, it is possible that updates and improvements may be desired in the future. This version of the app represents a minimum viable product in order to introduce the system at ConExpo. When production begins for the TD flange, decisions concerning the sourcing of the enclosure and PCB boards would need to be made.