

Statement of Work: TD System Application and Enclosure

**Created By:** Sam Hofmann

Date: 12/19/2019

Revision: 01

------

#### Overview

Dinamic Oil North America (DONA) is interested in adding a wireless user interface and data logging system consisting of an electronic enclosure and an iOS and Android application as a compliment to our 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 Pengo system, which is nearly complete, into the proposed DONA system.

## 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. Work on the app has been put on pause for the month of December 2019 and is expected to resume in January 2020. DONA and Bravo Team would begin development of the DONA system in December during the break with Pengo in order to minimize concurrent and possibly repetitive modifications of both systems. Progress updates will be communicated to DONA by the end of November so that the requirements can be updated accordingly and work can be resumed seamlessly between the Pengo system and DONA system.

## **Timeline**

With the development of the Pengo system being put on pause for the month of December, the Pengo system is not expected to be complete until February 2020 at the earliest. DONA is planning on showing the proposed system at ConExpo in early March, 2020; therefore, work would begin to convert the Pengo system to the DONA system starting in December 2019. The app would need to be done by early February, leaving eight to ten for development. ConExpo is being held from March 10 to March 14, 2020. A deadline for completion of the DONA system will be set for some time in mid-February.



# Statement of Work: TD System Application and Enclosure

#### Software

The app should function fully and uniformly on the iOS and Android platforms. It would be available on the Apple AppStore 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. Upon launching the app for the first time, the user should be prompted to agree to the terms and conditions and should not be granted access to the app until this is done.

#### **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.



# Statement of Work: TD System Application and Enclosure

## **Deliverables**

All deliverables to related to the Pengo system should also be made available to DONA, including electrical schematics for the enclosure, PCB footprint 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. Two enclosures will be needed for ConExpo.

#### 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.