

11/14/19

Old Business:

-Product Requirements Document (First Draft)

Need to add cost of labor and Material

-DAQ System

Daq

Strain Gauges

Applicatin kits

Resistors

-Concept Review Date

-Date11/21/2019

New Business:

Review conference call

Why Accelerometers-

Government testing

Vibration tables

Concerns with strain gauge-

Strain Gauge to specialized

Overcomplication

Math model-

Universal

Simple forces

Plug and play with FEA tools

Mount-

Ultra mount is a ridged body

Scope is also a ridged body

Acting forces on contact points with rail

DAQ-

Observer model

Set up for acceleration

Less money spent out of budget

Conclusion from conversation (Client Wants)

Universal mathmodelto take acceleration data to force on any rifle

Mathmodel to find forces for an FEA analysis on any scope mount

Redesigned Ultramount using above said model

Side Notes-

Nato 8694 rail type
Jaw- beta series titanium metal injected

Pulse

Impulse momentum theory

Whole gum modeled as the pic rail.

Int acceleration to get velocity

$F \cdot \Delta T = \text{Mass} \cdot \Delta \text{Velocity}$

$\text{Mass} \cdot \Delta \text{Velocity} = \Delta \text{Momentum}$

$F \cdot \Delta T = \text{impulse}$

Therefore

$\text{Impulse} = \Delta \text{Moumentum}$

$F = (\text{mass} \cdot \Delta \text{Velocity}) / \Delta t$

Hecotor

Metals

AL COBRA

CDA METALS

Accelerometer

<https://www.dytran.com/Search/?searchText=3313A1>