

Team Quiets Design Presentation

2013 Clean Snowmobile Challenge



600 ETEC - 600 ACE

	ETEC	600 Ace
Displacement	600 cc	600 cc
Stroke	2 Stroke	4 Stroke
HP	122	60
Fuel consumption	18 mpg	28 mpg



Turbocharger, Catalytic Converter, and Exhaust



Increased power-to-weight ratio

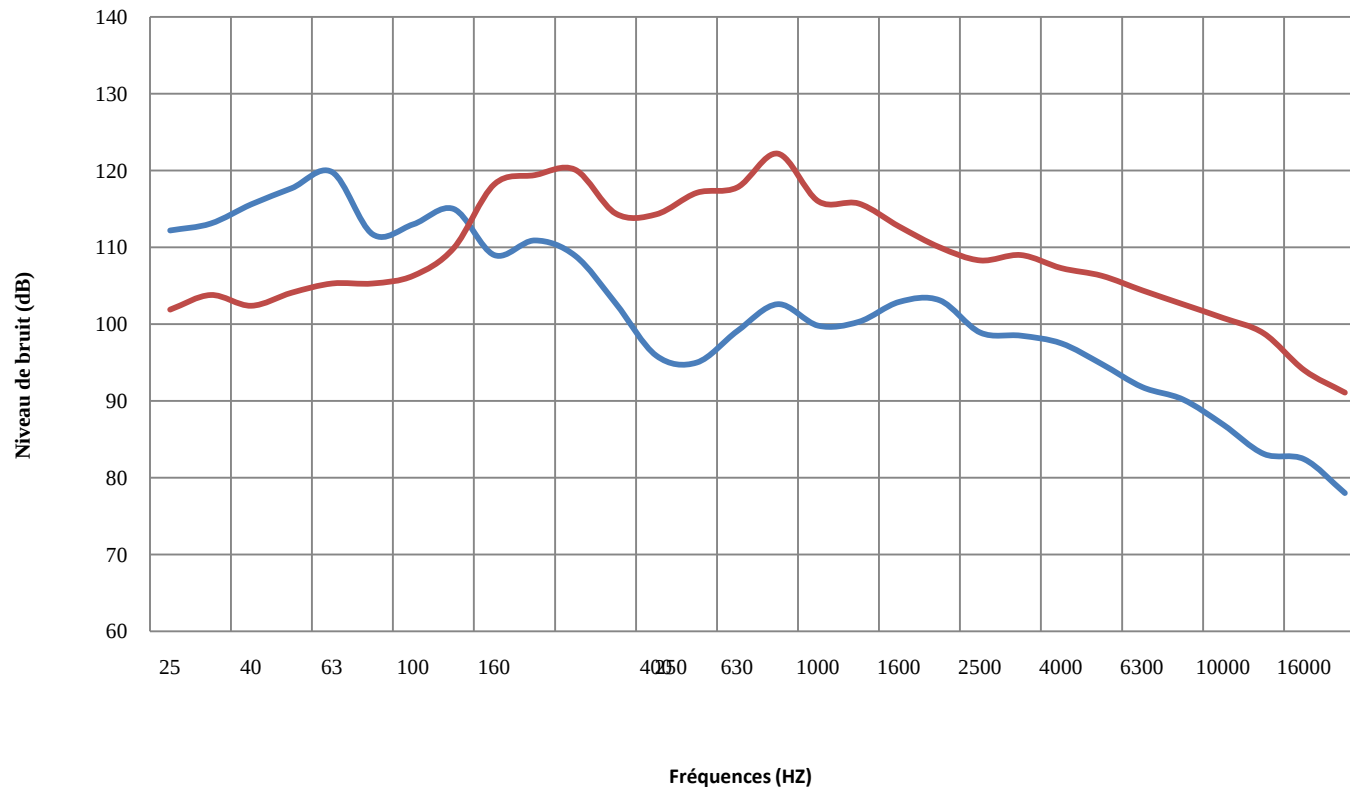


Cleaner emissions



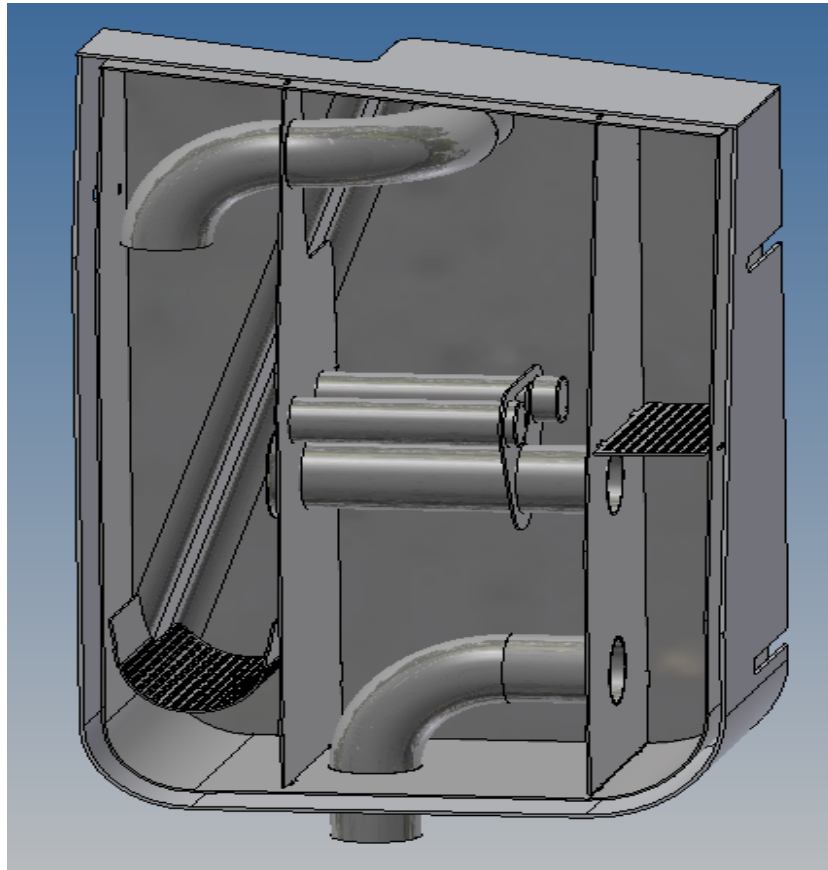
Less noise

Exhaust Design



Exhaust Design

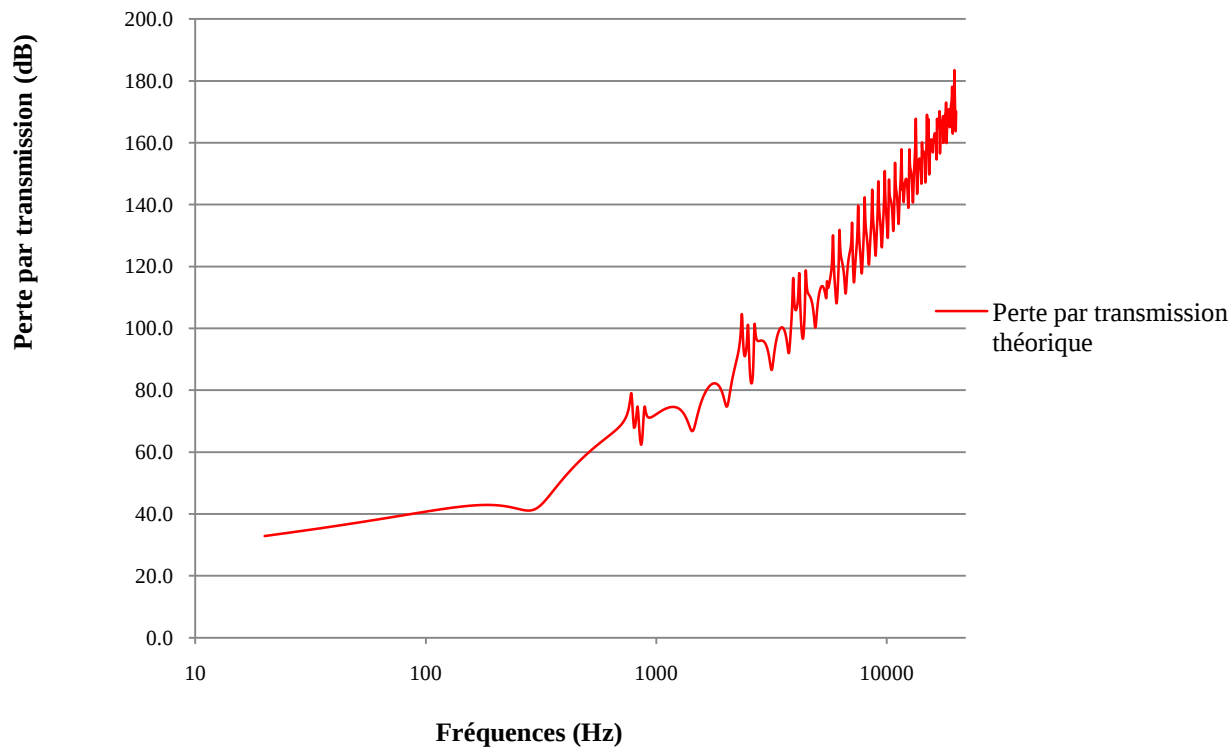
- Exhaust compartment divisions



Acoustic Results

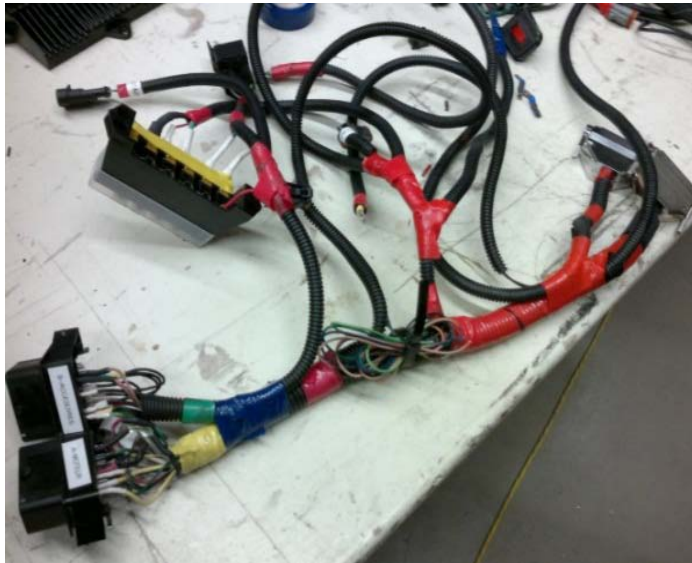
- Reduction of the 1 kHz band

Perte par transmission théorique

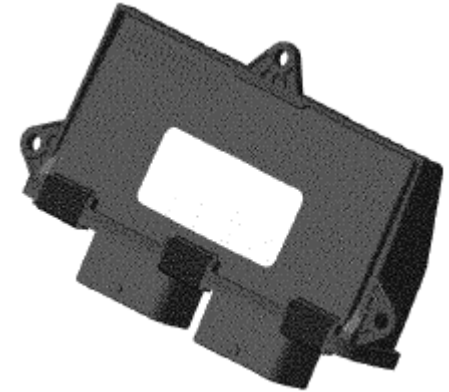


Plug-and-Play Electrical System

Stock Harness



Adapter Harness



Stock ECU



Megasquirt 3 Low-Cost ECU

Other Improvements



Flex-fuel sensor

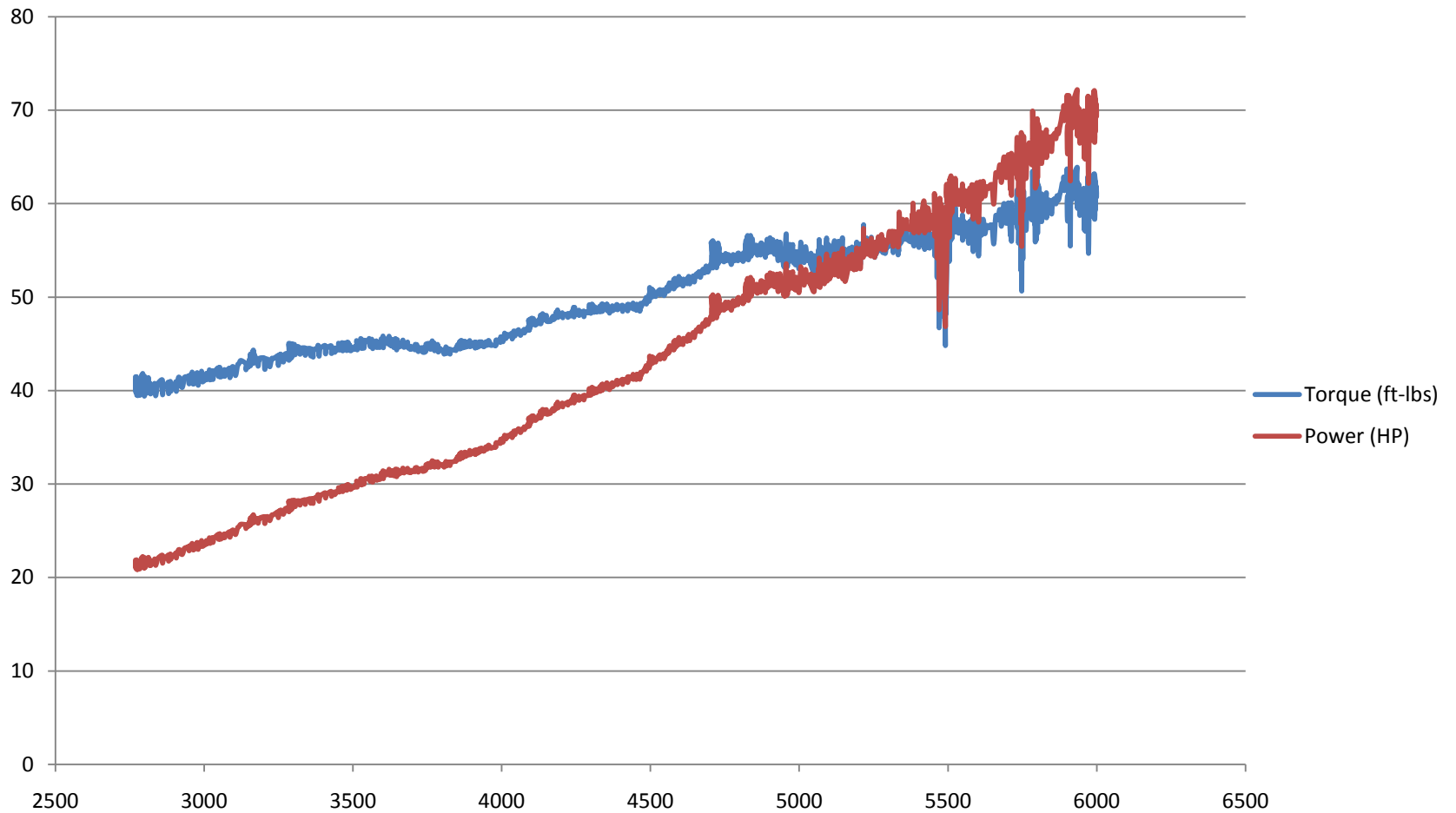


O2 Sensor – closed loop control

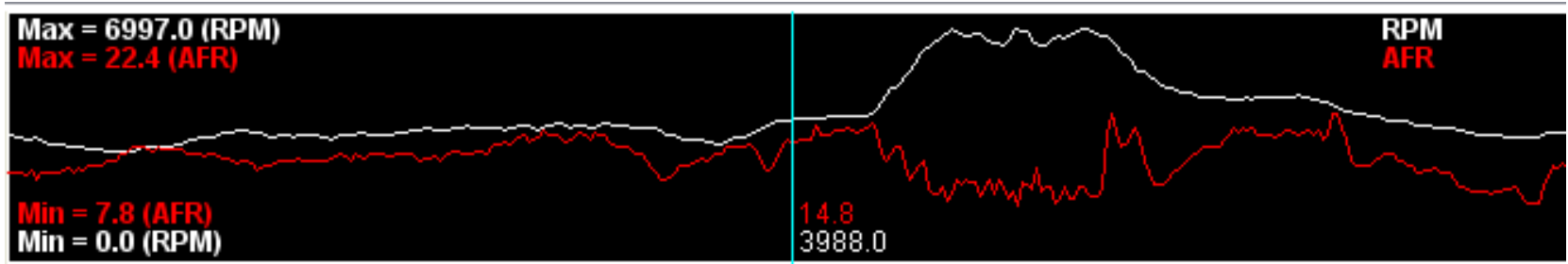


User-selectable Eco and Performance Modes

Results - Dyno



Results – Closed Loop AFR



Conclusions and Future Improvements

- +\$2500 to MSRP for entire system
- Solid foundation for future development
- New injection strategy
- EGR valve