HELMET 911

Orange B Mock-Up Review

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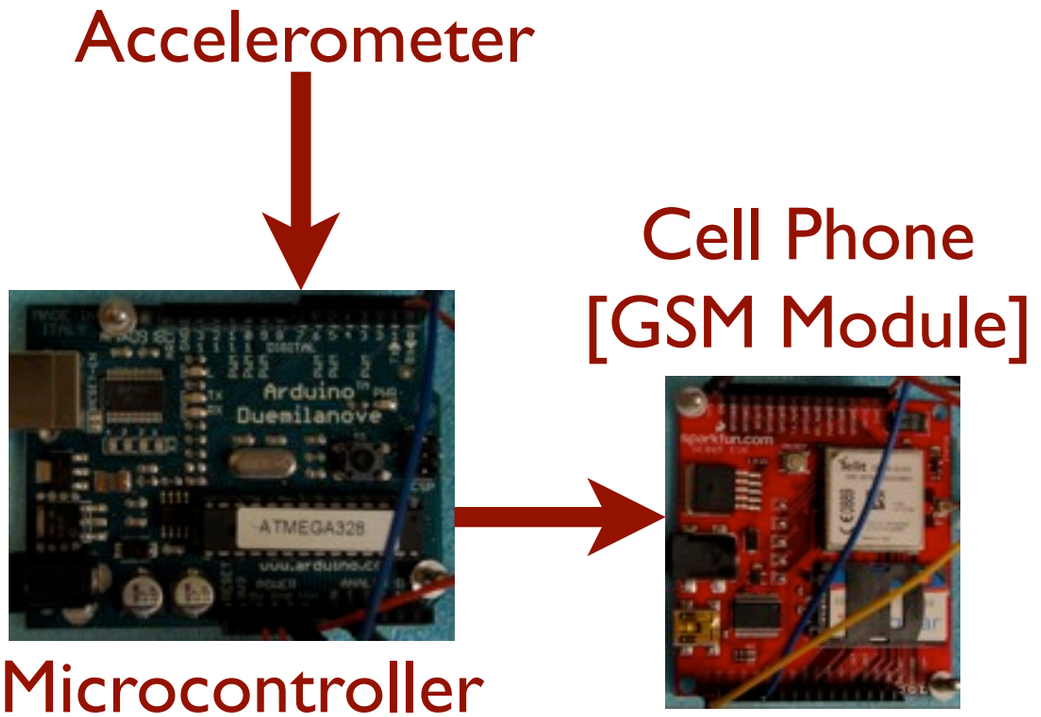
Design Concepts

- **Product:** Crash activated emergency contact & location device



- **Customers:** Adventure Bikers, Touring Bikers, & Concerned Parents

User Contract

* Detailed User Contract Available with Mock-Up in LAB or online

Attribute	Metric	Unit	Value
Safety	Passes Helmet Safety Test SNELL Impact Test Doesn't add injury [compared to control]	m/s ^ 2 %	peak<300 <110%
Reliable	Mean time between failures (MTBF)	Hrs	>1000
Detect Impact	Accurate detection & interpretation [false+]	%	<3
Robustness	Impact resistant Weather resistant Temperature resistant	G % C	>320 99 -20--50
Self-diagnostic	Low battery/ Not functioning/ No cell signal	Binary	Yes
Obtains Help	Sends accurate location Coverage of target areas Reach help quickly	% % Min	>95 >90 <1
Price	additional cost to helmet	$	<100

Identified Risks

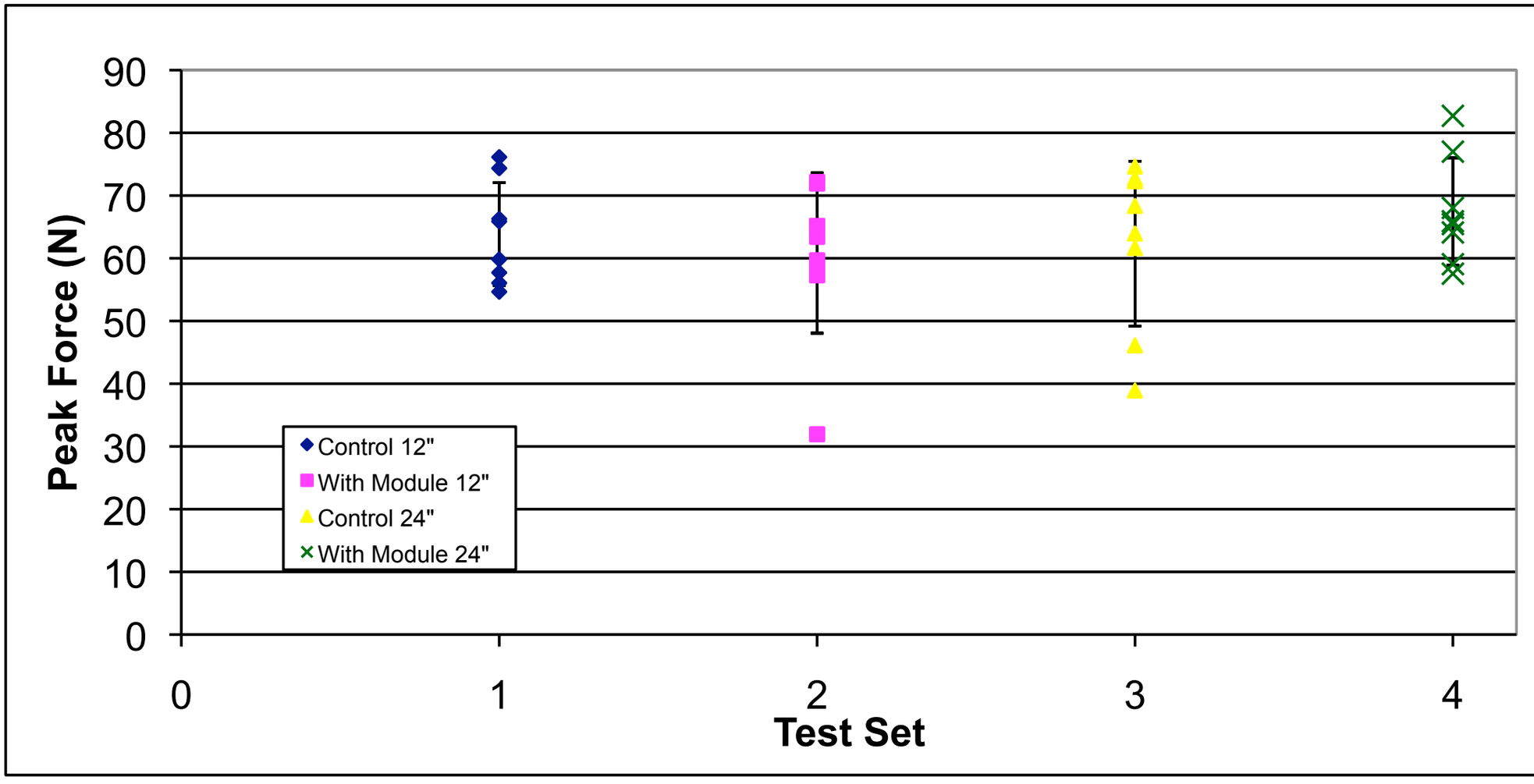
Risk # 1
Does Not
Affect Integrity
of Helmet

Alone Biker
CRASH

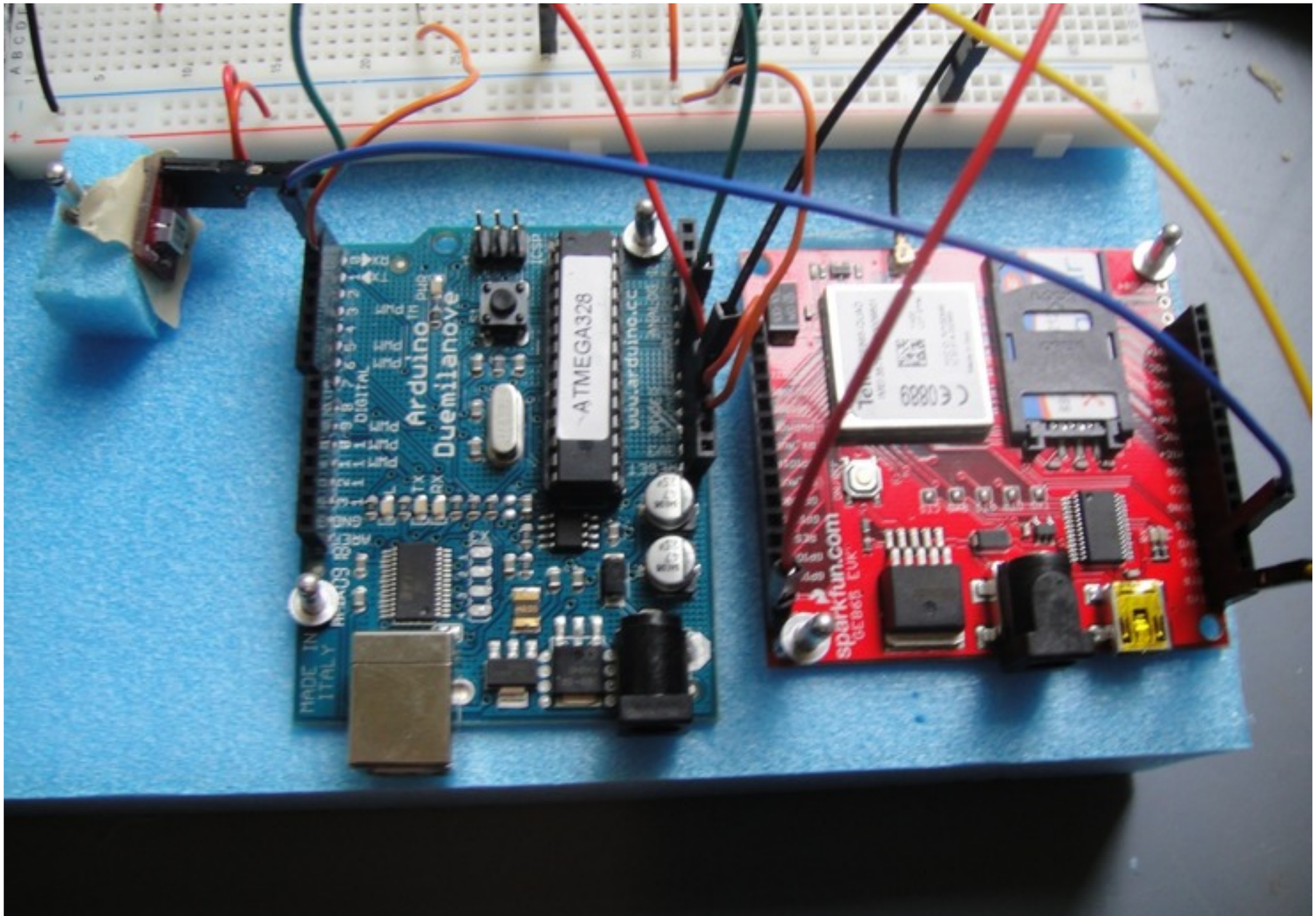
Detect Impact
w/ Limited
False Positives

Risk # 2
Make Call &
Provide Info

Head Force Measurements



Successfully Bread-Boarded Sensing and Communication Electronics



Conclusions

- **Helmet integrity and rider safety not compromised.**
- **Able to reliably detect impact and complete call for help.**