

Flight Test Safety Workshop  
Savannah, Georgia

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Ten Lessons Learned From  
Motorcycle Racing  
(and How They Apply to Flight Testing)



*By*  
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# Rusty Lowry

## Motorcycle Racer

6 time National vintage  
champion (AHRMA)  
3 Bonneville speed records  
USA team member for  
UK/USA Match Races  
Well over 400 races



## Flight Tester

Technical Director USNTPS  
Technical Director VX-23  
Member SETP  
Member SFTE Tech Committee  
Chairman NATO Flight Test Team

# Motorcycle Racing

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- National Racing Series
  - Roadracing (Daytona, Sears Point, Mid-Ohio)
  - Dirt Oval (Ashland, Oglethorpe, Sacramento)
- Vintage Motorcycles (1930's to 1970's)
- Former Professional Racers
  - BMW Legends
  - Sponsored Riders (Barber Motorsports)
- International Riders
- High Level of Competition

# Lesson #10

## Be Ready to Fall Down

- Leathers
- Helmet
- Gloves
- Boots
- Back Protector



## • Be Ready to Eject/Egress

- Anti-Exposure Gear
- Parachute
- Location

IF YOU ARE NOT  
ALREADY  
WEARING IT - IT  
IS TOO LATE TO  
PUT IT ON

# Lesson 9

Some may have better hands but....

None should be better prepared

Track notes

Gearing

Chair Fly

Starter



Test plan, Flight Test Practice, Crew Rest, Chair  
Fly

# Lesson 8

- Sometimes 2<sup>nd</sup> is the Best You Can Finish
- Trying Harder isn't often successful
- Reset your priorities and beat the guy in third

If You Cannot Hit  
The Hard Test Point  
– Go For The Easier  
One or Knock-It-Off



# Lesson 7

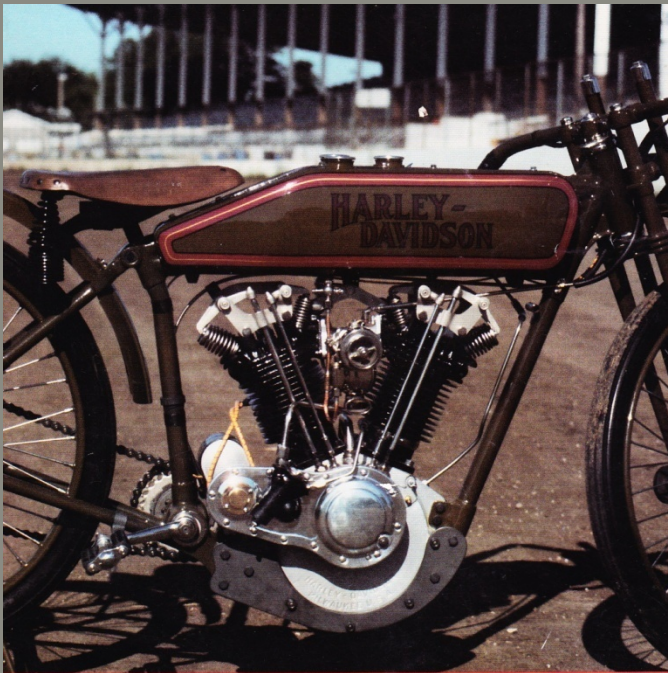
## Smooth IS Fast



Easy Progression from test point to test point  
Save the stick raps for open loop tasks

# Lesson 6

- Pre-Flight Is Vital
  - Motorcycles Need Gas to Run.....
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- Aircraft even more so..... not only fuel
    - CG, Configuration, Weapons & Tires (?)





# Lesson 5

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## Details Matter

- Little Broken Parts = DNF (just like big ones)



*STP* Turbine Car  
at Indianapolis

Tire valve stem at  
Daytona

H-6 lock washer at  
Patuxent River

# Lesson 4



- Maintain Situational Awareness
- (your competition is not always in your field of view)
- Where's the airfield?

# Lesson 3

## Winning Is Enough – Don't Show Off



“You will win a lot of races by finishing ahead of the rider in second place” Jeff Smith – World Champion Moto-Cross

Hit the Test Point –  
That's enough & That's  
Professional

# Lesson 2

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Weather Will Get You if You Are Not



Rain  
Wind  
Cold

Changes in flight  
Crosswinds and  
Precip or Ice

# LESSON #1

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It Is NOT Always Good When Everyone is Looking AT YOU.....



It Is WORSE When They're Pointing

# Summary

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- Motorcycle Racing AND Test Flying are potentially dangerous and always challenging activities.
- BOTH offer chances to excel and chances to suffer embarrassment, loss, and defeat.
- LEARN from others' experience and share lessons across communities
- Be a professional, be productive, be ready

# BONUS LESSON

- Winning beats losing any day!



Be a Winner

Join SETP/SFTE

