



# MILITARY & POLICE FITNESS ASSESSMENT

THE RUN PORTION OF THE TEST

OVER VIEW OF THE <http://orbiter.com/military-training/> system



# The problem Orbiter system solves:

- Military and Police Forces time a run portion of a fitness assessment test. The results of these test are 'make or break' career tests. If a participant fails the test, they can lose their job.
- Time Accuracy is crucial. Orbiter has been tested by Edwards AFB to be 1/100 second accurate.
- Manual stop watch timing has been found to be 2 seconds inaccurate on average; and worse is transposition of numbers. For example, a "34" become "43" when written down.
- Manual testing can be off by minutes.

# Orbiter system solves continued:

- Another problem is testing mass numbers of participants quickly and accurately. Orbiter is able to produce accurate times for groups of participants. This is true for even for hundreds of troops.
- Orbiter results have held up in Court because they are accurate. This reduces liability to the agency.
- Even Cell phone clocks are not accurate. This is because the phones time is synchronized to the nearest cell tower. When a phone is between two towers, a flipping back and forth can cause 7 seconds differentials in time. This makes iPhone time in-accurate.

# Overview of the Orbiter System

- Orbiter has over 10 years experience timing Military Fitness Tests. Orbiter is now standard equipment at many military bases for the United States, Canadian Armed Force and NATO.
- In todays world new recruits are often out of shape. Recruits are often out of shape computer gamers Orbiter helps the command see improvement in fitness readiness for individuals at the company level.

# Orbiter has Simple Set Up. Just turn “On”.

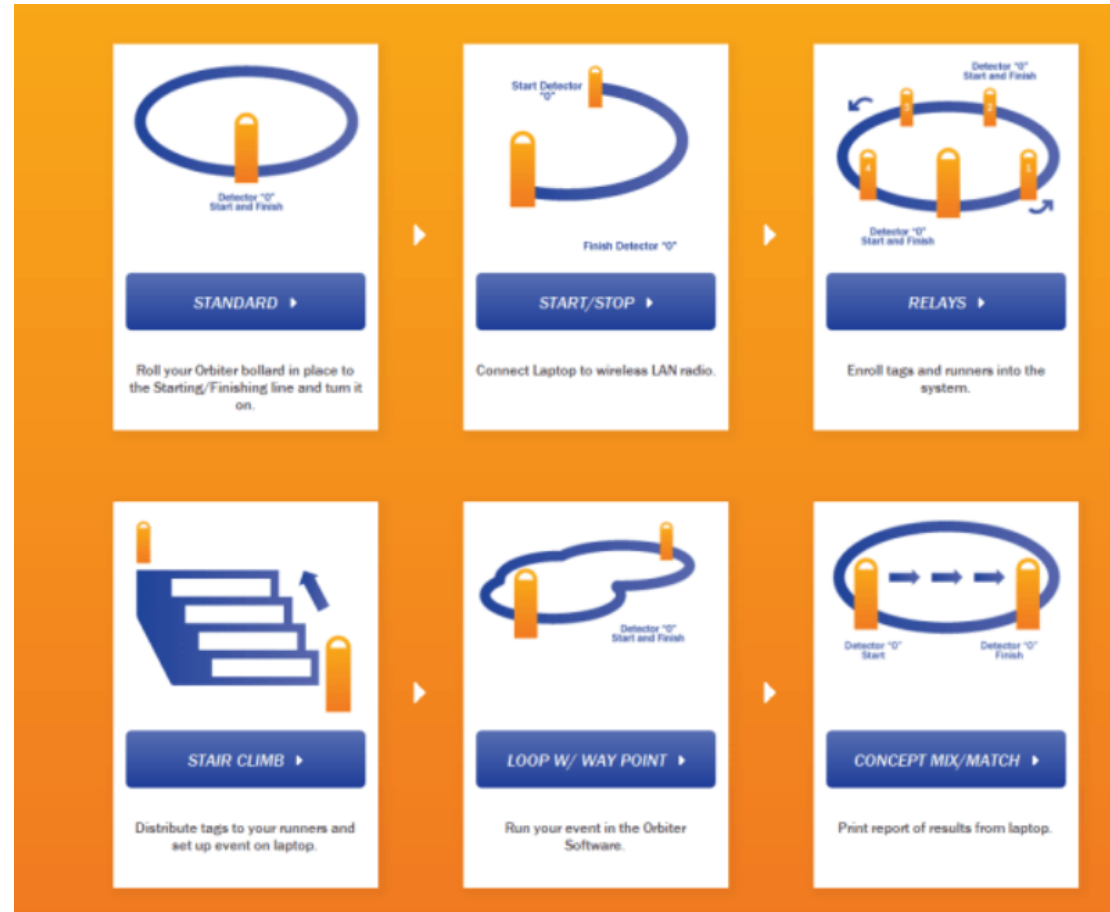
- Orbiter Offers Various System: Permanent with a reader fixed to a pole or wall. Outdoor (Track Side) and wall mounted Indoor (Indy) system.
- Second, Mobile, such as the Spire tower, and the Military Sling bag.
- All system may operates in real time and logging modes.

# Orbiter is the most Versatile System:

- Orbiter supports various test set-ups such as:
- Pre set number of laps. Automatic shuts off per participant when finished. Ensures times are accurate.
- Split times per lap. This allows for a quick audit proving completion of test.
- With two Orbiters, out and back tests proving the participant did the full test. Or, Start and Finish at different locations.
- Mass Gun Starts (Everyone starts at same Time). 100+ at once.
- Individual Starts (Spread participants out on track).
- “Cloning” so tests are reset back to back in 4 key strokes.
- “Reprocessing” so original time data is used to change mistaken configurations and salvage a test.
- PATH Tests between detectors in any order. Obstacle Courses.
- No limit to the number of detectors connected in real time.

# Create your own Tests.

Use more than one Orbiter reader.



# Connectivity Options between Orbiters and Military Tablet

- By Just turning the Orbiters “On” they auto-connect to the tablet / lap top. No Dynamic IP to fail. Heart beat and Watch Dog shows connectivity to one or many without IP Addressing. **This is the reason “anyone” can operate the system.**
- Orbiter is localized and not internet based. Thus it is completely secure for the military. All data is controlled by the user. There is no cloud sever.
- **Option:** Use of the Iridium satellite network. The first ever satellite bridge is used so that connectivity is from the tablet to the detectors without a cloud server. This ensures security.
- Connectivity options to a tablet are ethernet, wi-fi (20 m) , military wi-fi (4k line of sight), Cellular, Satellite (Iridium - anywhere in the world).



Proven rugged: Artic, Desert, Tropical.  
Drop-proof good for years of operation.

### Product Reader Choices:

Mobile Spire. For track side testing.

Mobile Rugged Military Backpack. Excellent for PATH Events.

Indoor Wall Mounted Indy. For indoor testing at a gym.

Permanent Outdoor Track Side System.

Low Cost Safe AGM Batteries, Approved Safe for  
Military Air Transport / Helicopter Shipment.



# Real Time Display Choices

- Premium LED Displays for outdoor permanent use. Bright and High energy for clear viewing in direct sunlight.
- Economy LED Displays of any size with shading for outdoor use.
- Displays may be custom configured using HTML and HDMI wireless devices.
- Stacking of more than one participant results such that many results shown at once.
- Military tablet allows tester to call out results / lap times as participant pass instantly.
- Optional secure private wireless wi-fi network outside of the internet. Tweet results..

# Tag Choices

UHF passive wrist / ankle tags (5 Year guaranteed) that read in any direction equally.

UHF Bib tags that last 1 year.

Microwave wrist / Arm tags for extended range.

# PARTIAL LIST OF BASES & POLICE CURRENTLY USING ORBITER

## Partial List:

Edwards AFB, CA

US Capitol Police

Las Vegas, NV Police

Buffalo NY Police

Supreme Allied Command, NATO, Belgium

Canadian Armed Forces, Toronto, CA

Kirtland AFB, NM

San Antonio, Air Force, TX

US Air Force Academy, CO

Yokosuka Navy Base, Japan

Aviano AFB, Italy

US Navy Boot Camp, Great Lakes

US Navy Academy, MD

Fort Knox, US Army, KY



# COMPETITIVE COMPARISON:

## Mat Systems Disadvantage:

Cabling and un cabling requires lengthy time to set up. Delicate copper frays. Tripping. Missed tag detects because RF power is 40% less than Orbiter due to loss of long cables and vehicles run over mats and bend delicate copper antennas. Short life. Often Complicated software is used not written for military / police. Must place mats on flat ground to reduce tripping hazard.

## New Hard Plastic Fold-Out Mat Disadvantage:

Cable inside fray as they are set up and down. Tripping. Heavy Plastic cube to move with antenna segments. Plastic Pelican Box is not needed. Heavy and another device not needed. Moving hinge parts break over time.

## Competitive Side Antennas:

They have 40% less power output due to cable length. Time consuming set up with cables, fittings, and stand.

