OPTICS TRADE

LRF BINOCULARS

March, 2020

LRF BINOCULARS

- LRF binoculars combine two optical instruments in one device → Binoculars and Laser Rangefinder
- Laser rangefinder for measurement of the **distance**
- All LRF Binoculars are **eye-safe**
- With ballistic **software**, the **calculation of bullet trajectory** can be done → very helpful to correct the ballistic turret or ballistic reticle
- LRF binoculars can be costly

OPTICAL PERFORMANCE OF RANGEFINDING BINOCULARS COMPARED WITH REGULAR BINOCULARS

- Some features are **slightly better** on regular binoculars → small differences, most people don't even notice them
- The optical performance of **premium LRF binoculars** can almost match with the regular binoculars

Cheaper LRF binoculars

- have up to **10% loss** of light transmission → laser build in only **one barrel** (optical performance is **different for each eye**)
- For the majority of long-range hunters, the trade-off between range finding capabilities and a bit weaker optical performance is **well worth taking**

SMARTPHONE CONNECTIVITY

- Very popular ever since **Sig Sauer** introduced their first rangefinder → connection with a smartphone through **Bluetooth**
- Every small detail is essential when shooting on **long distance**
- Smartphone connection enables the use of **advanced ballistic calculators** and the creation of the **ballistic curve** for a specific rifle

SMARTPHONE CONNECTIVITY

- Zeiss and Leica already produce their series of LRF binoculars:
  - Zeiss Victory RF series
  - Leica COM series

Swarovski is currently manufacturing the Riflescope DS series.

10X42 LASER RANGEFINDING BINOCULARS

- 10x42 configuration is used throughout the day for:
  - watching on **longer distances;**
  - shooting at targets;
  - **hunting** in the mountains;
  - **safari.**
- They fade faster in low light compared to the 8x42.

LEICA RANGEFINDING BINOCULARS

- **Leica's Geovid** was the pioneer of laser rangefinder binoculars
- Several series of Geovid:
  - Leica Geovid COM
  - Leica Geovid R
  - Leica Geovid HD-R
  - Leica Geovid HD-B
- Perger Porro prism system
- First to offer programming of user's own ballistic curve in the incorporated ballistic software

ZEISS RANGEFINDING BINOCULARS

- When Leica started to produce their first series of Rangefinding binoculars, **Zeiss** was the first to follow → Victory RF
- Software calculates the **ballistic curve** of the rifle and the **amount of clicks needed for elevation correction** at a measured distance
- The user enters the ballistic data - **bullet drop** in the **App** on its phone → The App then **calculates the number of clicks**
- Hunting App and binoculars are **synchronized**

ZEISS RANGEFINDING BINOCULARS

- Like Zeiss, **other manufacturers** started to develop **ballistic calculators**
- The optical performance of these devices **can not compete** with Zeiss
- Zeiss is the only manufacturer that managed to **hide** the rangefinding elements under the surface → only two buttons on the upper side of the binoculars

SWAROVSKI RANGEFINDING BINOCULARS

- Swarovski EL Range → exceptional optical performance
- **SWAROAIM** electronic integrated.
- **Inclinometer** calculates the **distance** and the equivalent horizontal distance with laser measurement and helps to **correct** the **ballistic turret** or **reticule**
- The same light transmittance and the same color fidelity in **both barrels**
- Swarovski LRF binoculars can also measure through the **glass** which is a great improvement

STEINER RANGEFINDING BINOCULARS

- Besides the 8x30 model, Steiner also produces 10x30 and 7x50 configuratios of LRF binoculars
- **Porro prism system**
- Powerful **laser** → measuring up to 1,700 m
- **Compact**, high quality, reliable, and extremely **durable**

BEST RANGEFINDING BINOCULARS

- Since Leica was the first to enter, they do have a bit of advantage over Swarovski and Zeiss
- The differences between them are **minimal** → hard to say which one is the best

Each one has its pros and cons:

  - Swarovski EL Range → vast field of view and very innovative **carrying straps**
  - Leica LRF binoculars → powerful **laser** (long-distance measurements) → measurements are unbelievable **fast** → no other manufacturer can compete with that
  - Zeiss Vicory RF → unique **design** - it looks just like an ordinary binocular → Zeiss allows **smartphone connectivity** for two years already, while Leica only since 2020

- Leica, Swarovski, and Zeiss currently have **top rangefinding technology**, and no other manufacturer can match that **at the moment**


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