

MINUTE

HAND

HOUR

HAND

DAY HAND

SECOND

HAND

## HAWKER HURRICANE

CALENDAR WATCH **Instruction Manual** 

Vol. 1.01 EN

AVI-8.CO.UK

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### LIMITED EDITION

#### **QUICK DATE CORRECTION**

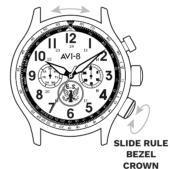
- 1. Press button "A" to adjust date hand. Date hand will advance 1 day per push.
- \* The date hand will advance at 00:00 midnight, not 12:00 noon.

#### HOW TO USE THE SLIDE RULE **BEZEL**

Turn the slide rule bezel crown to rotate the inner slide rule bezel. You can use it for the following functions:

- 1: MULTIPLICATION
- 2: DIVISION
- 3: CALCULATING GROUND SPEED (1)
- 4: CALCULATING GROUND SPEED (2)
- 5: CALCULATING GASOLINE CONSUMPTION
- 6: CALCULATING THE RATE OF **CLIMB OR DESCENT**
- 7: CALCULATING THE DISTANCE OF **CLIMB OR DESCENT**
- 8: NAUTICAL AND STATUTE MILE CONVERSION

#### INNER SLIDE RULE BEZEL **TURNS IN BOTH CLOCKWISE AND ANTI-CLOCKWISE** DIRECTIONS





## 2: DIVISION



To divide with the Slide rule Bezel, also use the unit index (10 with triangle). Place the dividend (the quantity to be divided by another number) on the outer scale opposite the divisor (quantity by which another is divided) on the inner scale. Opposite the unit index (numeral "10" on inner scale), read answer on outer scale.

Divide 120 by 4. Place 120 on outer scale opposite 4 on the inner scale. Read answer, 30, on outer scale opposite unit index (10 with triangle on inner scale).

3: CALCULATING GROUND SPEED (FUNCTION 1)



The Bezel and fixed inner scales are used for determination of ground speed problems. Two of the following quantities are available for its solution: time, distance, ground speed.

#### Example:

Known: Distance and Time.

Required: Ground Speed.

A pilot finds by the use of checkpoint that he has traveled 104 miles in 35 minutes. What is the ground speed?

Solution: Move the Bezel scale until 104 on the mobile scale is set opposite 35 on the fixed scale. Opposite the hour index (the arrow marked "MPH" directly over the hour 12) read 178 miles per hour on the Bezel scale.

#### **HOW TO SET THE TIME**

SLIDE RULE

BEZEL

**BUTTON A** 

NORMAL

CROWN

**POSITION** 

1ST **POSITION** 

SLIDE RULE

**BEZEL** 

CROWN

DATE

HAND

- 1. Pull the crown out to the 1st position.
- 2. Turn the crown clockwise to set hour and minute hands.
- 3. Push crown back to normal position.

#### **HOW TO SET THE DAY**

- 1. Pull the crown out to the 1st position.
- 2. Turn the crown clockwise to set the day.
- \* The day hand will advance 1 day after 4am is reached.
- 3. After the day has been set, push the crown back to the normal position.

#### **HOW TO SET THE DATE**

- 1. Pull the crown out to the 1st position.
- 2. Turn the crown clockwise to set the date.
- 3. After the date has been set, push the crown back to the normal position.

#### 1: MULTIPLICATION

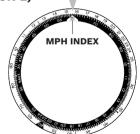


To multiply with the Slide Rule Bezel, use the unit index (number "10" with triangle in the inner scale). Always set the multiplier (the number by which another is multiplied) opposite the unit index on the inner scale and read the answer on the outer scale opposite the multiplicand number (number to be multiplied by another) appearing on the inner scale.

#### Example:

To multiply 7 x 12, set 12 (the multiplier) on outer scale opposite unit index ("10") on the inner scale. Opposite 7 (the multiplicand) on the inner scale, read the answer 84 on the Bezel.

### 4: CALCULATING GROUND SPEED (FUNCTION 2)



Example: Known: Distance and Speed.

Required: Time.

A pilot wants to know how long it will take to go 486 miles at a ground speed on 156 miles per

Solution: On the Bezel scale set 156 opposite the MPH index on the fixed scale. On the inner scale opposite 486 on the mobile scale read 187 minutes (or 3 hours and 7 minutes).

#### **5: CALCULATE GASOLINE** CONSUMPTION



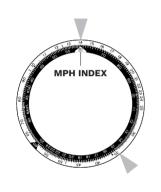
Two of the following quantities are available for gasoline consumption problems: Total gallons used, time, rate of consumption.

#### Example:

Known: Time and Rate of Consumption.

Required: Total Gallons Used.

#### 7: CALCULATE THE DISTANCE OF **CLIMB OR DESCENT**



Two of the following quantities are available: Distance, time, speed. The methods used in examples 4 and 5 should be used.

A pilot wishes to know how many gallons are necessary to fly 3.5 hours at an average rate of consumption of 11.5 gallons per hour.

Solution: Opposite the "MPH", set 11.5 on the Bezel scale. Then, opposite 210 minutes on inner scale on the Bezel scale read 41 gallons.

#### **6: CALCULATE THE RATE OF CLIMB OR DESCENT**



Two of the following quantities are available for solution: total altitude of descent, time and rate of descent (or climb).

#### Example:

Known: Rate of Ascent and Total Elevation in Ascent.

Required: Time.

### 8: NAUTICAL AND STATUTE MILE **CONVERSION**



On the fixed Inner scale both nautical (NAUT.) and statute miles (Stat.) are shown. The conversion from statute to nautical or nautical to statute miles is read directly on the Bezel.

Known: 60 Statute Miles.

Required: Nautical miles.

Solution: Set 60 on Bezel opposite to "STAT." Read 52 nautical miles on Bezel opposite to "NAUT."

# Example:

The pilot in the previous example wishes to know how fat he will have traveled when his climb is finished. His average true air speed is 120 miles per hour and he is aided by a tail wind of 20 miles per hour.

Solution: Set 140 miles per hour (120+20) on the bezel scale opposite "MPH" on fixed scale. Opposite 14.8 minutes (computed from example 6) on fixed scale read 34.5 miles on Bezel scale.



A pilot climbs to 7400 feet above his starting point at the average rate of 500 feet per minute. How long will this require?

Solution: Set 500 on the Bezel scale opposite the "unit index" ("10" on the fixed scale). Opposite 7400 on the mobile scale, read answer, 14.8 minutes on the fixed scale.