

PRISMATIC COMPASS



INTRODUCTION

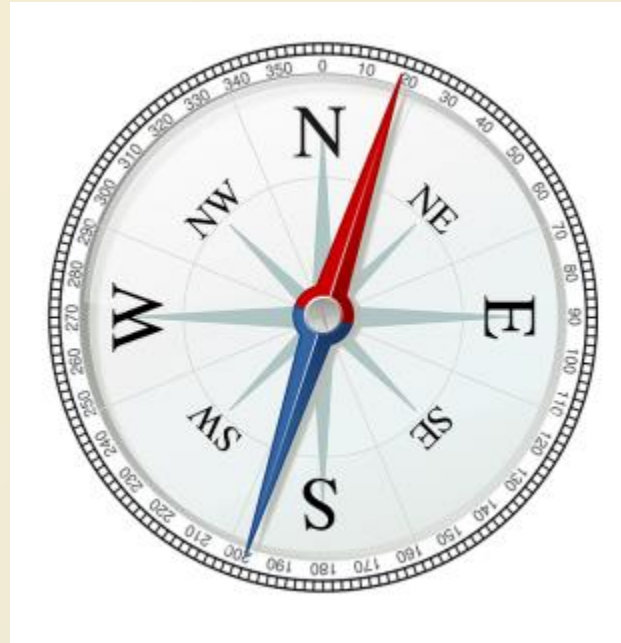
- ❖ **COMAPSS DEGREE PADNE KE KAM AATE HAIN AUR MAGNETIC NORTH AUR BAKI DISHA KO SUCHIT KARTE HAIN**
- ❖ **PRISMATIC COMPASS DISHA KO DUNDNE AUR PHIR USKO MAINTAIN KARNE MEIN MADAT KARTA HAI.**
- ❖ **PRISMATIC COMPASS ACCURATE HOTE HAIN LEKIN JAHAN PAR IRON KA ASAR JADA HO WAHAN KAAM NAHIN KARRTE.**
- ❖ **MAGNETIC COMPASS EK BATAI HUI DISHA YAH ZAMINI NISHAN KI KI DEGREE BATATE HAI.**
- ❖ **THERE ARE TWO TYPES OF PRISMATIC COMPASSES. THE **DRY** AND THE **LIQUID**.**

PREVIEW

- **UDDESH**
- **PART - I COMPASS KE BHAG**
- **PART - II COMPASS KO SET KARNA AUR BEARING LENA**
- **PART - III COMPASS ERROR.**
- **PART – IV GPS**
- **CONCLUSION**

UDDESH

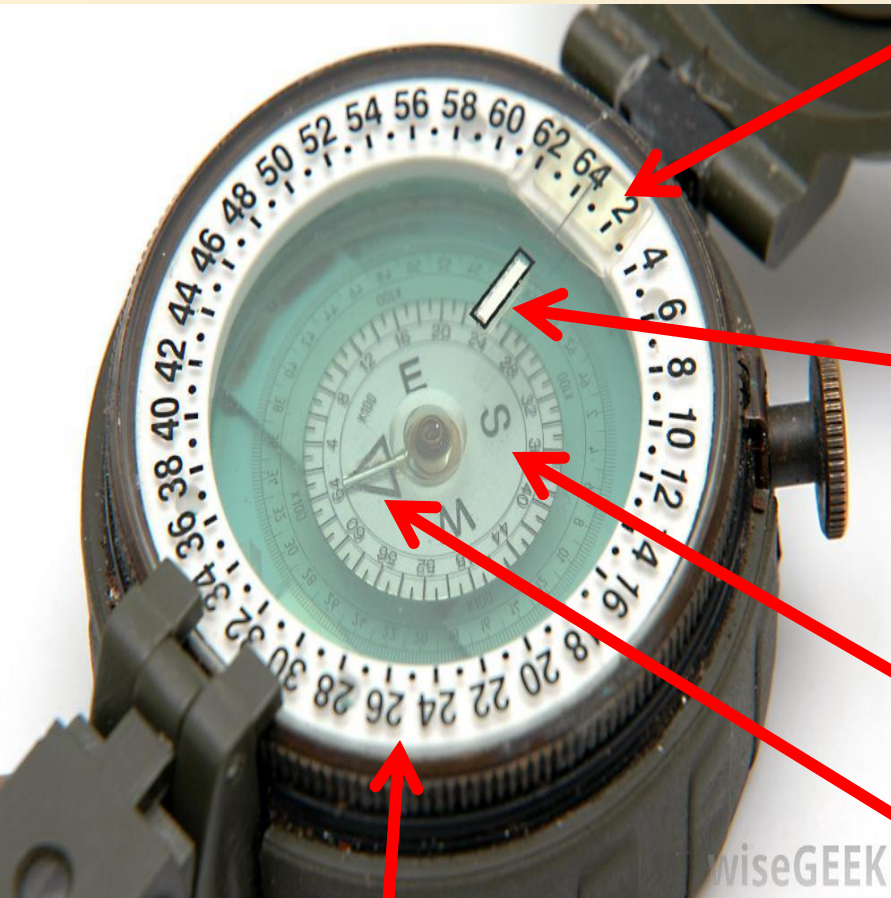
**PRISMATIC COMPASS AUR GPS KE
BARE MEIN JANKARI DENA**



PART - I

COMPASS KE BHAG

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- LUBBER LINE. COMPASS PAR BEARING KO SET KARNE KE KAM AATA HAI. YEAH CHAKILE LUMINOUS PAINT KA HOTA HAI AUR HINGE KE PASS HOTA HAI.
- DIRECTION MARK. MILLED VANE PAR EK RECTANGULAR MARK. COMPASS KE SAATH NAVIGATION KARNE KE KAM AATA HAI.
- DISHAYEN. N,S,W,E.
- ARROW HEAD. HAR SAMAY NORTH KI TARAF.

MILLED VANE. IS PAR HAR 5 DEGREE PAR MARKING HOTA HAI. MARKING 360 DEGREE TAK YANI PURE CIRCLE KA HOTA HAI. HAR READING KA "0" NAHIN LIKHA JATA ---MATLAB 330 DEGREE "33" SE DARSHAYA JATA HAI.

COMPASS KE BHAG

• TONGUE.

• LID.

• HAIR LINE.

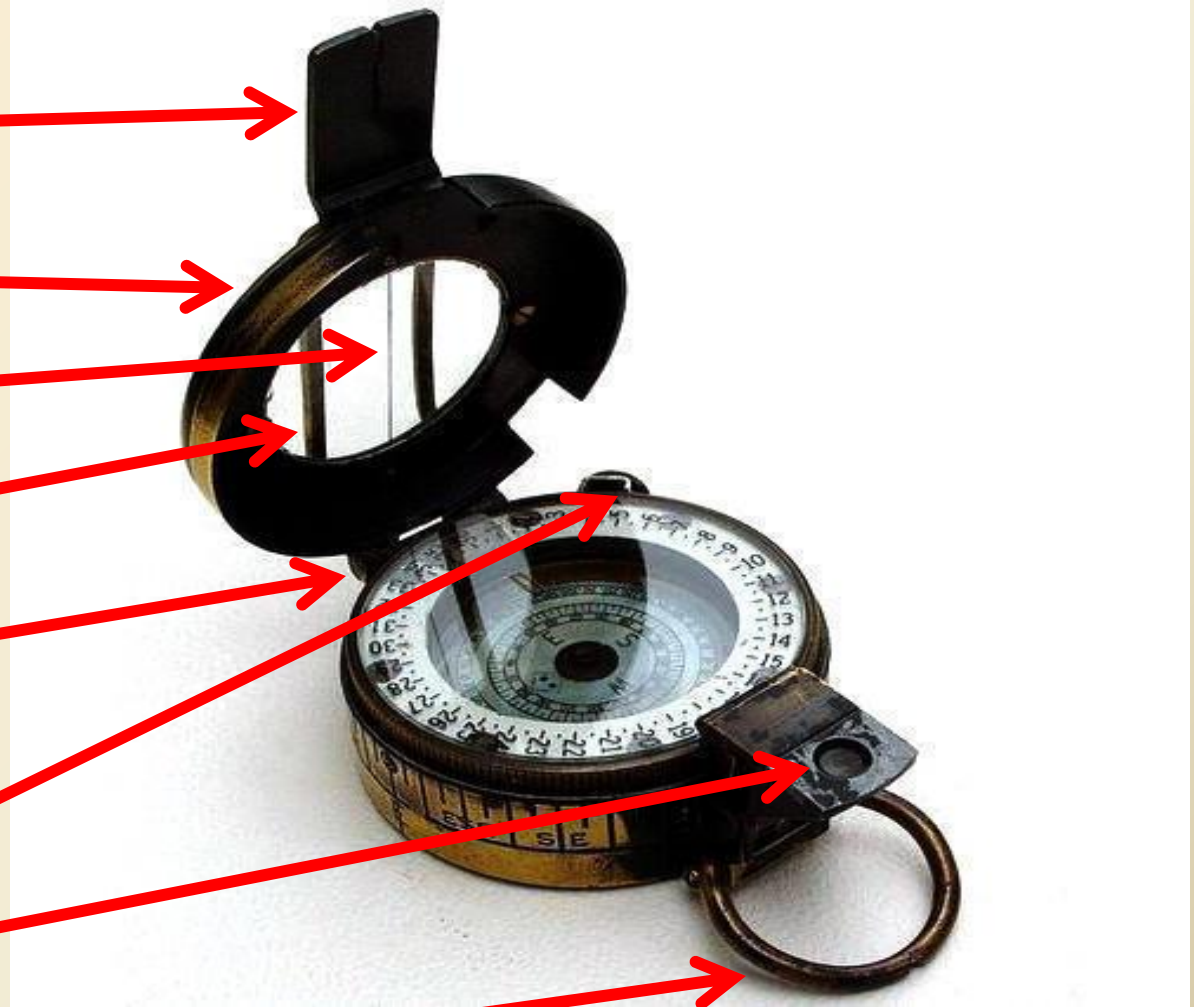
• WINDOW

• HINGE.

• CLAMPING SCREW

• FOLDING PRISM

• THUMB RING.



PART-II

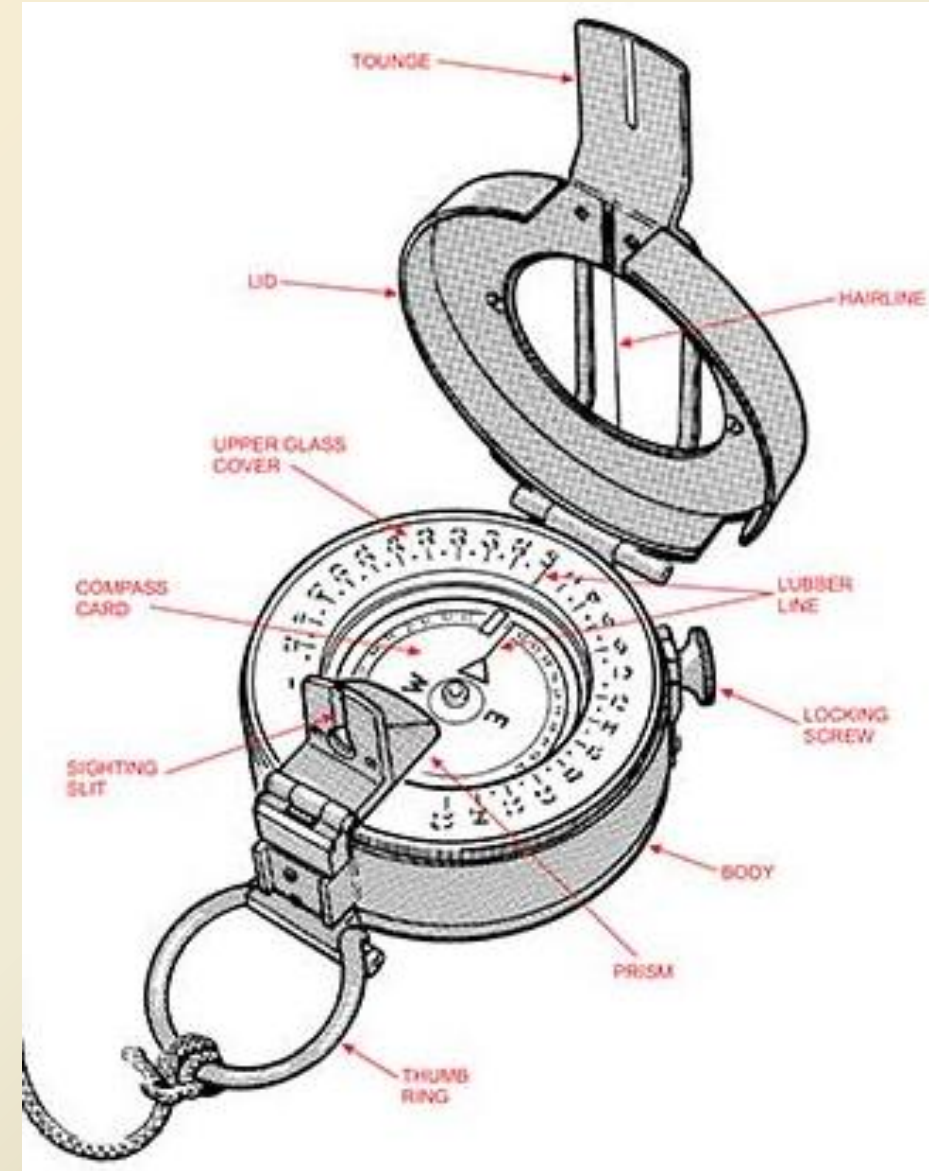
COMPASS SE BEARING

LENA AUR SET

KARNA

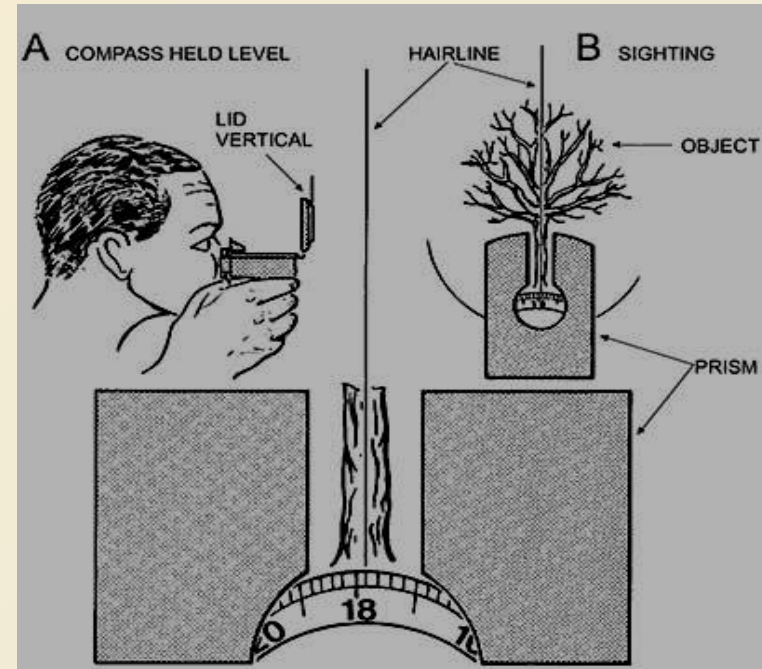
COMPASS SE BEARING LENA AUR SET KARNA

- LID KO KHOLE TAKI WHO BODY KE RIGHT ANGLES HO.
- FOLDING PRISM KO PUSH KAREN TAKI MILLED VANE SE MIL JAYE
- APNA THUMB THUMB RING MEIN DALLE AUR FOREFINGER COMPASS KE NICCHE RAKHE AUR SAMANTAR RAKHE.



COMPASS SE BEARING LENA AUR SET KARNA

- PRISM KO AANKH KE PASS LAYEN.
- AB SLOT KE BICH SE DIKHEGA.
- PRISM KI MADAT SE FLOATING CARD PAR READING DIKHAI DENGI.
- TONGUE KE SLOT KO OBJECT PAR RAKHE.
- AB DHYAN SE PRISM SE DEKHE, JAHAN HAIRLINE KA NICHLA HISSA SE PRISM PAR JO READING DIKTI HAI WHO US OBJECT KI BEARING HAI.

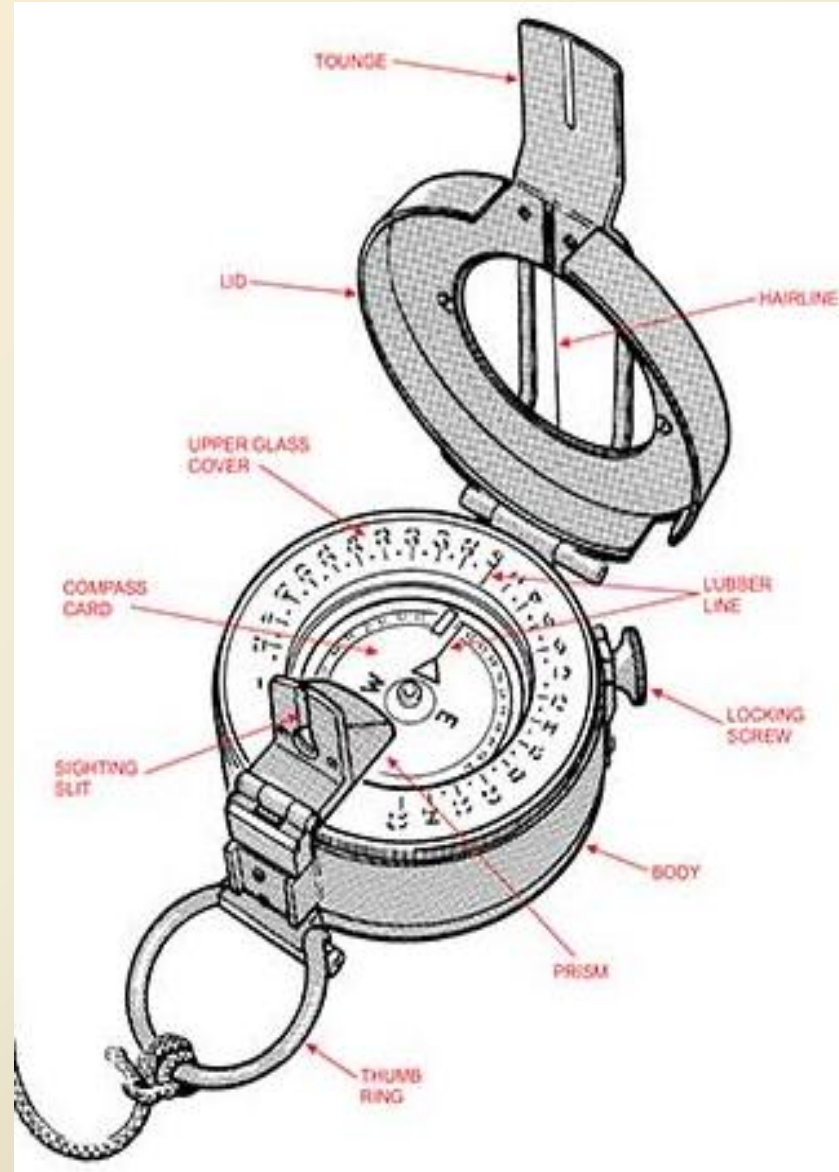


SETTING THE COMPASS

- **KABHI AAP KO HOW SAKTA HAI KI AA KO OBJECT NA DIKHE AUR APP KO USKE PASS JUNGLE MEIN SE YAH RAAT KO JANA HO.**
- **AEESE MEIN HUM APNI MAUJUDA POSITION SE MAP PAR OBJECT KA BEARING LETE HAIN.**
- **IS MAP KI BEARING KO HUM MAGNETIC BEARING MEIN CONVERT KARENGE.**
- **IS MAGENTIC BEARING KO HUM COMPASS PAR SET KARTE HAIN.**
- **MANLO MB HAI 240 DEGREE**

SETTING THE COMPASS

- AB CLAMPING SCREW KO DHILA KAREN
- MILLED VANE KO GHUMAYEN TAKI 24 (YANI 240 DEGREE) “LUBBER LINE” PAR AAJAYE.
- CLAMPING SCREW KO TIGHT KARO.
- AB COMPASS 240 DEGREE KE LIYE SET HAI .
- LID KO KHOLEN AUR COMPASS KO APNE HAATH MEIN SIDHA AKHEN.
- AB DAHINEAN – BAYEN GHUMEN JAB TAK KI ARROW HEAD DIRECTION MARK KE SIDH MEIN NA AAJAYE.
- AB APKA MARCH KARNE KA DIRECTION SET HAI.



PART - III

COMPASS ERROR
(GALTI)

COMPASS ERROR (GALTI)

LOCAL MAGNETIC ATTRACTION.

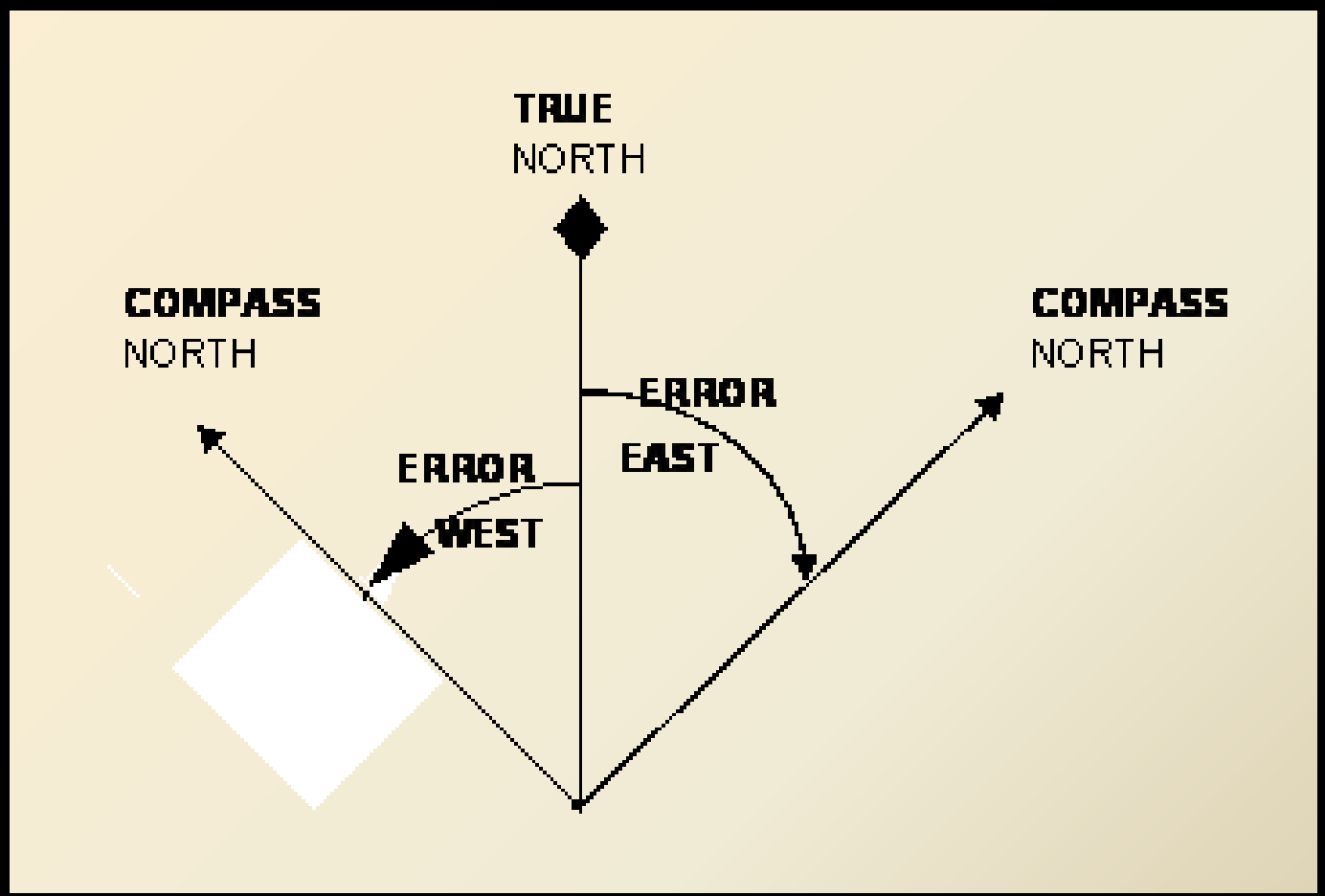
- COMPASS KA ACCURACY AAS PASS KE WATVARAN SE PRABHAVIT.
- AGAR AAS PASS LOHA HAI TOH COMPASS KE NEEDLE PAR PHARAK DALE GA. USI PRAKAR AGAR KISSI STHAN PAR ZAMIN MEIN BHI AGAR LOHA HAI TOH USSE BHI PHARAK PAREGS.
- ISLIYE MAPS PAR US JAGEH KA VARIATION LIKHA HOTA HAI JOKI CALCULATE KIYA HOTA HA. YEAH MAP KA VARIATION HAI.
- NICCHE DIYE HUA HAI SAMAN SE DURI RAKNE KA WARNAN
 - **TANKS** - 75YDS
 - **HEAVY GUNS** - 60 YDS
 - **TELEPHONE WIRE** - 40 YDS
 - **BARBED WIRE** - 10 YDS
 - **STEEL HELMET/ RIFLE** - 03 YDS
 - **CAP BADGE** - 1/2 YDS

COMPASS ERROR (GALTI)

- **COMPASS KA BHI KUD KA READING MEIN PHARAK HO SAKTA HAI.**
- **NEEDLE MAGNETIC NORTH KO NA POINT KARE WHO THORA LEFT-RIGHT POINT KAR SAKTA HAI.**
- **YEAH COMPASS ERROR HAI**
- **ISKO PATA KARNE KE LIYE:**
 - **ZAMIN PAR DO NISHAN DHOONDE JO KI MAP PAR BHI MAJOOD HAIN .**
 - **INKA GRID BEARING LE**
 - **MAGNETIC BEARING MEIN TABDIL KAREN.**

COMPASS ERROR (GALTI)

- AB COMPASS SE UNHI DONO ZAMINI NISHAN KI BEARING LE.
- AB JO DO MAGNETIC BEARING KA JO FARAK HAI WHO COMPASS ERROR HAI.
- ISKO EK-DO AUR NISHAN SE CONFIRM KAREN.
- JAB BHI KISSI ZAMINI NISHAN KI BEARING LIJATI HAI TOH COMPASS ERROR KO BHI DHYAN MEIN RAKHNA HAI.
- COMPASS ERROR KO POSSITIVE(+) OR NEGATIVE(-) SIGN SE COMPASS PAR LIKHA JATA HAI. (E.G + 2 WILL BE DEDUCTED FROM THE COMPASS READING AND VICE VERSA FOR - 2).



PART - IV

GPS

GPS

- **GPS EK SYSTEM HAI JOKI SATELLITE AUR RECEIVER KO MIL KAR BANATA HAI.**
- **GPS KI MADAT SE KOI BHI APNE POSTION SAHI 10 FIGURE GR MEIN NIKAL SAKTA HAI.**
- **AASMAN MEIN 24 SATELLITE HAIN JO KE ALAG ALAG UUCHAI PAR GHUM RAHI HAIN.**
- **EK TIME PAR 5-8 SATELLITE ZAMIN KE KISSI BHI JAGAH SE DIKH SAKTI HAIN.**
- **GPS YEAH KOI YANTAR KO GR NIKALNE KE LIYE KAM SE KAM 3 SATELLITE KI ZARURAT HAI.**

GPS

- **GPS HAR KOI ISTEMAL KAR SAKTA HAI.**
- **GPS MOBILE AUR GHADI MEIN BHI HAI.**
- **GOOGLE MAPS BHI GPS KA ISTEMAL KARTA HAI JO HUM KO GADI MEIN NAVIGATE KARNE MEIN MADAT KARTA HAI.**
- **FISHERMAN, SHIPS, AEROPLANE SAB GPS ISTEMAL KARTE HAIN**
- **FAUJ MEIN SPECIAL GPS (RECEIVER) MILTE HAIN JINKO NAVIGATION MEIN ISTEMAL KIYA JATA HAI.**
- **GPS AB CRUISE MISSILE PAR BHI LAGAYA JA RAHA HAI TAKI MISSILE SAHI TARGET PAR PAUNCHE.**

