SIGHT FORM KOLBE LONG TERM ALMANAC

Date: _____/_____/_____ Body Observed: _____
UTC Time: _____ → Page 62 _____ . _____ Body Position: Upper / Lower / Center
Assumed Position: Lat _____ ° _____ ' N S Lon _____ ° _____ ' E W

Sextant Measured Altitude Hs: _____ ° _____ '
Eye Height: _____ Ft M → Page 68 Dip: _____ '
Index Correction: IC: _____ '
Apparent Altitude: Ha: _____ ° _____ '
Monthly Correction for the Sun's Limbs: → Page 67 _____ '
Altitude Correction: → Page 68 _____ '
Height Observed: Ho: _____ ° _____ '

KOLBE LTA REFERENCE FOR DETERMINATION OF GHA & DECLINATION
LTA Values ***a*** and ***b*** for given year: → Page 61 ***a*** = _____ ***b*** = _____

→PAGES 4 – 51 FOR b VALUE LISTED ON UPPER LEFT/UPPER RIGHT OF PAGE:

SUN GHA

GHA SUN for the day: _____ ° _____ '

Hourly Acceleration: Decimal time x HRLY ACC
_____ . _____ x _____ ' = _____ '

Quadrennial correction: ***a*** x QUAD CORR
_____ x _____ ' = _____ '

HOURS: _____ °
MINUTES: _____ ° _____ '
SECONDS: _____ '
SUB TOTAL: _____ ° _____ '
IF > 360: - 360 °
FINAL GHA: _____ ° _____ '

GHA Increments → Page 63

SUN DECLINATION

00 HOURS DEC SUN: _____ ° _____ '

Hourly Rate: Decimal time x HRLY RATE
_____ . _____ x _____ ' = _____ '

Quadrennial correction: ***a*** x QUAD CORR
_____ x _____ ' = _____ '

FINAL DEC SUN: N S _____ ° _____ '

STAR GHA for _____
GHA Increments → Page 63
GHA ARIES for the day: _____ ° _____ '

a increment: _____ ° _____ '
HOURS increment: _____ ° _____ '
MINUTES increment: _____ ° _____ '
SECONDS increment: _____ ° _____ '
TOTAL: _____ ° _____ '
IF > 360: - 360 °
FINAL GHA ARIES: _____ ° _____ '

GHA Increments → Page 63

Year 2000 Star Positions → Pages 54-59

SHA for star in month: _____ ° _____ '

Annual correction = ANN. CORR. x (YEAR – 2000)
_____ x _____ = _____ '

Corrected SHA: _____ ° _____ '

DEC for star in month: _____ ° _____ '

Annual correction = ANN. CORR. x (YEAR – 2000)
_____ x _____ = _____ '

FINAL DEC star: _____ ° _____ '

SIGHT REDUCTION $Hc = Sin^{-1}[Sin(Lat)xSin(DEC) + Cos(Lat)xCos(DEC)xCos(LHA)]$
$Zo = Cos^{-1}[\{Sin(DEC)-Sin(Lat)xSin(Hc)\}/\{Cos(Lat)xCos(Hc)\}]$

LHA = GHA - Lon GHA: _____ ° _____ '
Lon: _____ ° _____ '
Subtract 360 if > 360 LHA: _____ ° _____ '

From iPhone ***Sight Calc***: Hc = _____ ° _____ '
Z = _____ °

If LHA <0 or 180<LHA<360: Zn = Zo
If 0<LHA<180: Zn = 360 – Zo

If N Lat, Zo = Z If S Lat, Zo = 180 – Z

Ho: _____ ° _____ '
- Hc: _____ ° _____ '
Distance Offset = _____ '

Zn = _____ °

Ho – Hc > 0 → Position Toward body observed