

## **BYGRAVE INSTRUCTIONAL FORM**

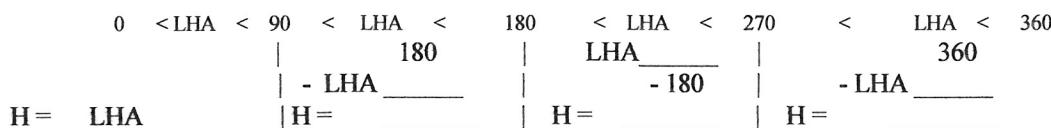
### Special rules:

If H is less than  $1^\circ$  or greater than  $89^\circ$  then choose a different assumed longitude to bring H within the range of the scales.

If declination is less than  $1^\circ$  omit the first step and set W equal to declination. If latitude is also less than  $1^\circ$  then assume a latitude of  $1^\circ$ . Compute Az and Zn. Interchange declination and latitude then start over again computing Hc using those values and disregard the Az derived during this second computation.

If Y is less than  $1^\circ$  or greater than  $89^\circ$  choose a different assumed latitude to bring Y within the range of the scales.

Compute Az. If Az is greater than  $85^\circ$  use this Az for computing Zn and for plotting the LOP. Interchange declination and latitude then start over again computing Hc using those values and disregard the Az derived during this second computation.



( If  $H < 1^\circ$  or if  $H > 89^\circ$  see special rules )

X = Co-Lat + or - W:

Declination same name: + W | -W | - W | + W  
 Declination contrary name: - W | - W | -W | - W

D \_\_\_\_\_  
(If declination is less than

H

Lat. — \_\_\_\_\_  
Co-Lat. \_\_\_\_\_  
W (+/-) \_\_\_\_\_

(179:60)

X \_\_\_\_\_ (Ignore sign of X)  
( If  $X < 90$  then  $Y = X$  ; If  $X > 90$  then  $Y = 180 - X$  )

Y \_\_\_\_\_ (Ignore sign of Y)  
 (If  $1^\circ > Y > 89^\circ$  choose a different assumed latitude)

(180) (179:60) (360) (359:60)

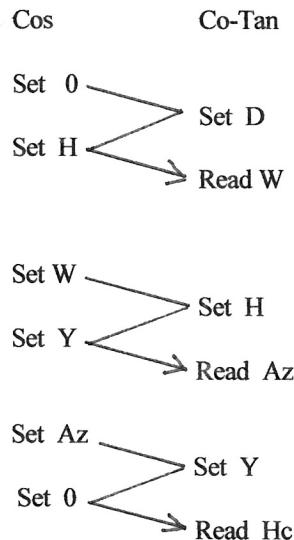
Az \_\_\_\_\_  
(If Az > 85° see special rules)

## Zn

## Hc

He

## INT T/A



Azimuth Rules		
North Latitude		
0 < LHA < 180	< LHA < 360	
If DEC or W > LAT	Zn = 360 - Az	Zn = Az
If DEC contrary or W < LAT	Zn = 180 + Az	Zn = 180 - Az
South Latitude		
If DEC or W > LAT	Zn = 180 + Az	Zn = 180 - Az
If DEC contrary or W < LAT	Zn = 360 - Az	Zn = Az