

PROJECT		POSITION COMPUTATION, ORDER TRIANGULATION (For calculating machine computation) For use of this form, see FM 3-34.331; the proponent agency is TRADOC.															
LOCATION				ORGANIZATION						DATE (YYYYMMDD)							
				° ' "													
<i>a</i>	2	To 3							<i>a</i>	3	To 2						
2 ^d ∠		&			+				3 ^d ∠		&			-			
<i>a</i>	2	To 1							<i>a</i>	3	To 1						
Δ <i>a</i>									Δ <i>a</i>								
					180	00	00.00							180	00	00.00	
<i>a'</i>	1	To 2							<i>a'</i>	1	To 3						
				° ' "													
First Angle of Triangle																	
<i>φ</i>				2	<i>λ</i>				<i>φ</i>				3	<i>λ</i>			
				s=	Δ <i>λ</i>								s=	Δ <i>λ</i>			
<i>φ'</i>				1	<i>λ'</i>				<i>φ'</i>				1	<i>λ'</i>			
Δ <i>φ</i>				$(\log s = \frac{b}{y/10,000} - 2)$				Δ <i>φ</i>				$(\log s = \frac{b}{y/10,000} - 2)$					
sin a				x cor. = $-\frac{1}{2}fb$				sin a				x cor. = $-\frac{1}{2}fb$					
cos a				x'				cos a				x'					
x=s sin a				H				x=s sin a				H					
y= -s cos a				Hx'=(approx. Δ <i>λ</i> ")				y= -s cos a				Hx'=(approx. Δ <i>λ</i> ")					
a=(x'/10,000) ²				Arc sin $= + \frac{V(Va)}{15}$				a=(x'/10,000) ²				Arc sin $= + \frac{V(Va)}{15}$					
y cor.=+fa				<u>Δ<i>λ</i>"</u>				y cor.=+fa				<u>Δ<i>λ</i>"</u>					
y_o				sin φ				y_o				sin φ					
y'				sin φ'				y'				sin φ'					
y₁				1+ cos Δ <i>φ</i>				y₁				1+ cos Δ <i>φ</i>					
Va —				$\frac{\sin \phi + \sin \phi'}{1 + \cos \Delta \phi}$ or sin <i>φ_m</i>				Va —				$\frac{\sin \phi + \sin \phi'}{1 + \cos \Delta \phi}$ or sin <i>φ_m</i>					
y₂				- Δ <i>a</i> " (approx.)				y₂				- Δ <i>a</i> " (approx.)					
V				+ F (Δ <i>λ</i> ") ³				V				+ F (Δ <i>λ</i> ") ³					
K (Va/1,000) ² +				<u>- Δ<i>a</i>"</u>				K (Va/1,000) ² +				<u>- Δ<i>a</i>"</u>					
COMPUTED BY				DATE (YYYYMMDD)				CHECKED BY				DATE (YYYYMMDD)					
NOTE: For <i>s</i> , under 8,000 meters omit terms under the heavy black line not in heavy bold type or underlined.																	