

REPORT OF THE SELECT COMMITTEE

ON GREAT CIRCLE FOR DISTANCE.—SYDNEY TO TAHITI ISLANDS.

Sydney ... Lat. 33° 52' S., Long. 151° 14' E.
Tahiti Islands, Lat 17° 29' S., Long. 149° 29' W.

Lat. 33° 52' = Co. Lat. 56° 08' and Lat. 17° 29' = Co. Lat. 72° 31'.
Long. 151° 14' E. to Long. 149° 29' W. = $\frac{1}{2}$ diff. Long. 29° 38' 30".
 $\frac{1}{2}$ diff. Long. 29° 38' 30" ... Sin. 9.6942313

Sin. ² ...	...	19.3884626	
Co. Lat. Sin. ...	...	9.9794593	
Co. Lat. Sin. ...	...	9.9192542	
		2)39.2871762	
		19.6435880	... 19.6435880
$\frac{1}{2}$ diff. of Co. Lat. Sin. ...	...	9.1537691	
72° 3' 42" Tang. ...	...	10.4898189	... Sin. 9.9783579
		27° 33' 24" ...	... 9.6652301
Distance, 3,307 miles	=	55° 6' 48"	

GREAT CIRCLE FOR COURSE.—SYDNEY TO TAHITI.

(See Diagram No. 4.)

55° 6' 48" ...	9.91398		
	0.08602	...	0.08603
59° 17' ...	9.93435	...	9.93435
72° 31' ...	9.97946	...	9.91925
S. 88° 28' E. ...	9.99983	S. 60° 29' W. ...	9.93963
Course from Sydney to Tahiti.		Course from Tahiti to Sydney.	

ON GREAT CIRCLE FOR DISTANCE.—AUCKLAND TO SAN FRANCISCO.

Auckland ... Lat. 36° 50' S., Long. 174° 49' E.
San Francisco, Lat. 37° 48' N., Long. 122° 24' W.

Lat. 36° 50' = Co. Lat. 126° 50' and Lat. 37° 48' = 52° 12' Co. Lat.
Long. 174° 49' E. to Long. 122° 24' W. = $\frac{1}{2}$ diff. Long. 31° 23' 30".
 $\frac{1}{2}$ diff. Long. Sin. ... 9.7167423

Sin. ² ...	...	19.4334846	
Co. Lat. Sin. ...	...	9.9032977	
Co. Lat. Sin. ...	...	9.8977123	
		2)39.2344946	
		19.6172473	... 19.6172473
$\frac{1}{2}$ diff. Co. Lat. Sin. ...	...	9.7826301	
Tang. ...	...	9.8346172	... Sin. 9.7514167
		47° 14' 31" ...	... 9.8658306
Distance, 5,669 miles	=	94° 29' 2"	

GREAT CIRCLE FOR COURSE.—AUCKLAND TO SAN FRANCISCO.

(See Diagram No. 5.)

94° 29' ...	0.0013309	...	0.0013309
62° 47' ...	9.9490402	...	9.9490402
52° 12' ...	9.8977123	126° 50' ...	9.9032977
N. 44° 49' E. ...	9.8480834	S. 45° 33' W. ...	9.8536688
Course from Auckland to San Francisco.		Course from San Francisco to Auckland.	