

REV 1

10 Apr 2020 HoE = 4.5 m, T = +5°C P = 1,000 hPa (1,000mb)

Ha (Tony) : Instrument heights corrected instrument Error and Horizon Dip.**Ho (Tony)** : Geocentric heights derived from Ha. Values not used in my own computations.**I finally computed : Hg (AMC)** : Geocentric heights derived from sextant observations, and :**Hdr (AMC)** : Geocentric heights computed from assumed DR position. *Antoine M. "Kermit" Couëtte*

Body	UT;	Ha (Tony)	Intercept + : T / - : A	Azimuth	Weight	Ho(Tony)	Hg (AMC)/ Hdr (AMC)
① Sun	11:58:38 12:00:23	33°24,4' 33°16,9'				33°38,9' 33°31,4'	
<i>Mean values</i>	<i>11:59:30.5</i>	<i>33°20.65'</i>	<i>+0.1'</i>	<i>215.6°</i>	<i>2</i>		<i>33°35.26' / 33°35.11'</i>
② Venus	12:09:40	54°19,3'				54°19,0'	
<i>Mean value</i>	<i>12:09:40.0</i>	<i>54°19.30'</i>	<i>+0.4'</i>	<i>161.6°</i>	<i>1</i>		<i>54°18.75' / 54°18.38'</i>
③ Sun	12:12:02	32°23,7'				32°28,2'	
<i>Mean value</i>	<i>12:12:02.0</i>	<i>32°23.70'</i>	<i>-0.3'</i>	<i>219.1°</i>	<i>1</i>		<i>32°38.26' / 32°38.57'</i>
④ Venus	12:14:12 12:16:56 12:18:58 12:20:35	54°29,9' 54°34,8' 54°38,4' 54°41,7'				54°29,6' 54°34,5' 54°38,1' 54°41,4'	
<i>Mean values</i>	<i>12:17:40.25</i>	<i>54°36.20'</i>	<i>-0.2'</i>	<i>164.6°</i>	<i>4</i>		<i>54°35.65' / 54°35.82'</i>
⑤ Sun	12:22:30 12:23:36 12:24:46	31°33,0' 31°27,5' 31°21,7'				31°47,4' 31°38,0' 31°32,2'	
<i>Mean values</i>	<i>12:23:37.33</i>	<i>31°27.40'</i>	<i>-0.4'</i>	<i>222.3°</i>	<i>3</i>		<i>31°41.90' / 31°42.32'</i>
⑥ Venus	12:40:30 12:42:05 ? 12:43:05 ? 12:44:12 12:45:37 12:46:33	55°08,8' 55°10,7' ? 55°10,7' ? 55°11,8' 55°13,6' 55°13,6'				55°08,5' 55°10,4' ? 55°10,7' ? 55°11,5' 55°13,3' 55°13,3'	
<i>Mean values</i>	<i>12:43:40.33</i>	<i>55°11.53'</i>	<i>+0.3'</i>	<i>174.8°</i>	<i>6</i>		<i>55°11.00' / 55°10.72'</i>
⑦ Sun	12:50:23 12:51:46 12:53:01 12:54:05	29°04,0' 28°55,6' 28°48,4' 28°38,6'				29°14,4' 29°05,9' 28°58,7' 28°49,0'	
<i>Mean values</i>	<i>12:52:18.75</i>	<i>28°51.65'</i>	<i>-2.4'</i>	<i>230.0°</i>	<i>4</i>		<i>29°05.98' / 29°08.33'</i>
⑧ Venus	12:55:55 12:57:01 13:00:15 13:02:35	55°15,4' 55°15,4' 55°15,4' 55°14,9'				55°15,1' 55°15,1' 55°15,1' 55°14,6'	
<i>Mean values</i>	<i>12:58:56.50</i>	<i>55°15.275'</i>	<i>-0.5'</i>	<i>180.8°</i>	<i>4</i>		<i>55°14.74' / 55°15.20'</i>

① Venus LAN method : **Transit Time at 12h56m49.4s, yielding Fix at N60°10.5' E029°45.8'**② **From Fix here-above used as DR, treat 8 sets of averaged observations as classical LOP's with individual weights equal to each number of observations. Final Fix at N60°10.6' E029°48.8'****GPS position : N60°10.3' E029°48.5' Difference between fixes : 0.3 NM**For further details +33-(0)6 12 88 06 36 / antoine.m.couette@club-internet.fr 12 April 2020