DID MH370 FIRST DEVIATE FROM ITS FLIGHT PLAN NEAR IGARI?

Introduction

At face value, the available data suggests that MH370 first deviated from its assigned flight path near the waypoint IGARI, located far out in the South China Sea.

If one accepts the official data as accurate and unaltered, then it follows with high confidence that the aircraft's initial deviation occurred in this region.

The following sections present various independent datasets that support this conclusion.

What	Reference
Secondary Radar diagram	Appendix A – Secondary radar diagram and last part SSR data
Secondary radar data (only provided up to Latitude N 5.2)	Appendix A – Secondary radar data and data
Military Radar sketches	Appendix B - Military Radar sketches
FlightRadar24 playback	Appendix C - FlightRadar24 playback
Last two Radio transmissions connected with MH370	Appendix D – Last two radio transmissions
ADS-B data	Appendix E – Last part of ADS-B data
ACARS position report	Appendix F - ACARS position report

Appendix A – Secondary radar diagram and Last part SSR raw data

Redacted radar data after 01:06:12.6 MLT to 01:19:45

	A	B	C	D	E	F	G
1	ID	Time (UTC)	Range (nm)	Azimuth (deg T)	Radar Source	Latitude	Longitude
311	320	06:01.2	159.19	23.86	KL SSR	5.20111	102.76556
312	321	06:04.9	159.69	23.86	KL SSR	5.20861	102.76889
313	322	06:08.8	160.19	23.86	KL SSR	5.21639	102.7725
314	323	06:12.6	160.67	23.87	KL SSR	5.22333	102.77611
315	324	30:33.3	58	47.5	KB Pri	6.81667	103.01111
316	325	30:37.0	57.5	47.3	KB Pri	6.81361	103.0025
317	326	30:40.0	57	47.5	KB Pri	6.80556	102.99861
318	327	30:44.0	56.5	47.6	KB Pri	6.79861	102.99361
319	328	30:48.0	56	47.6	KB Pri	6.79306	102.9875

Last entry of radar data

HOWEVER OFFICIAL REPORT SHOWS A RADAR PLOT SHOWING FULL COVERAGE FROM TAKE OFF TO IGARI

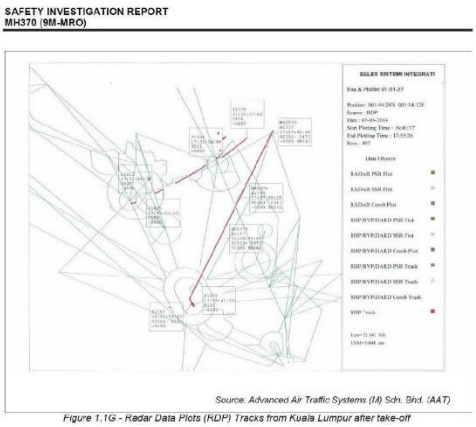
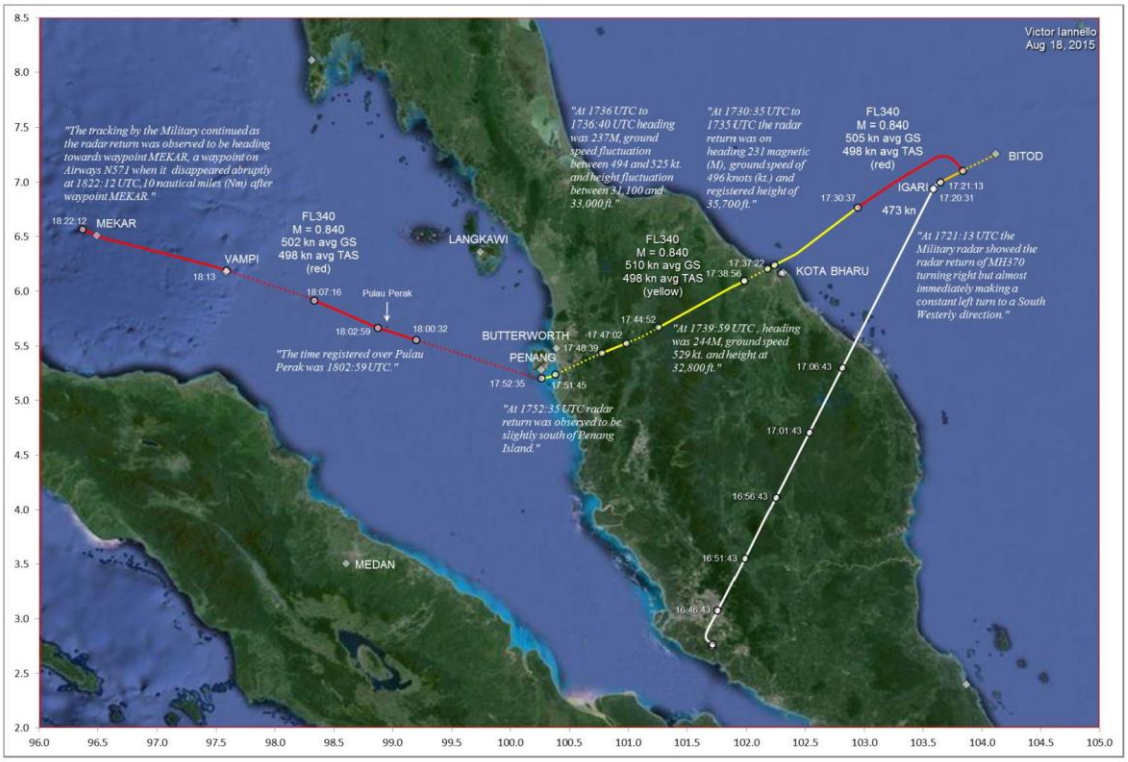


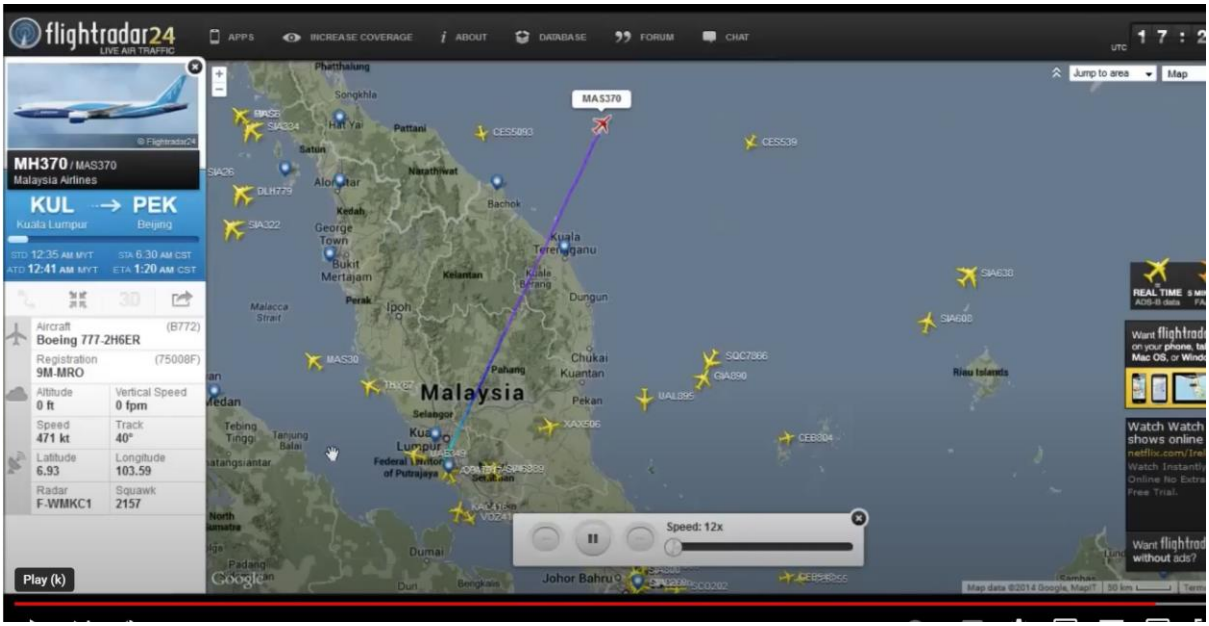
Figure 1.1G - Radar Data Plots (RDP) Tracks from Kuala Lumpur after take-off

Appendix B - Military Radar sketches

Some Observations on the Radar Data for MH370, by Victor Iannello, ScD, August 18, 2015



Appendix C - FlightRadar24 playback



Appendix D – Last two radio transmissions

	LUMPUR APPROACH	
12:42:05	MH 370	Departure Malaysian aa..Three Seven Zero
12:42:10	ATC	Malaysian Three Seven Zero selamat pagi identified climb flight level one eight zero cancel SID turn right direct to IGARI
12:42:18	MH 370	Okay...level one eight zero direct IGARI Malaysian one... aaa...Three Seven Zero
12:46:36	ATC	Malaysian Three Seven Zero contact Lumpur Radar One Three Two Six good night
12:46:40	MH 370	Night One Three Two Six Malaysian aaa.. Three Seven Zero
	LUMPUR RADAR (AREA)	
12:46:51	MH 370	Lumpur Control Malaysian aa.. Three Seven Zero
12:46:55	ATC	Malaysian Three Seven Zero Lumpur Radar good morning
		climb flight level two five zero
12:46:59	MH 370	Climb flight level two five zero Malaysian aaa... Three Seven Zero
12:50:06	ATC	Malaysian Three Sev
12:50:09	MH 370	Flight level three five
01:01:14	MH 370	Malaysian aa..Three zero
01:01:19	ATC	Malaysian Three Sev
01:07:55	MH 370	Malaysian aa.. Three zero
01:08:00	ATC	Malaysian Three Seven Zero
01:19:24	ATC	Malaysian Three Seven Zero contact Ho Chi Minh one two zero decimal nine Good Night
01:19:29	MH 370	Good Night Malaysian aa.. Three Seven Zero

These radio messages would only occur near IGARI

Appendix E – Last part of ADS-B data

1	Time	ID	Identification	Vx_knot	Vy_knot	Mode3A	FL	ICAO	Latitude	Longitude	ACARS CLOSEST MATCH		Time reported by ATSB EMAIL
562	62422.73	226194	MAS370 _	0	0	2157	350	75008F	6.911891	103.5762			
563	62423.3	226206	MAS370 _	0	0	2157	350	75008F	6.912964	103.577			
564	62423.75	226220	MAS370 _	0	0	2157	350	75008F	6.913651	103.5775			
565	62424.3	226234	MAS370 _	0	0	2157	350	75008F	6.91473	103.5783			
566	62424.82	226246	MAS370 _	0	0	2157	350	75008F	6.915427	103.5788			
567	62425.41	226260	MAS370 _	283.9942	376.9689	2157	350	75008F	6.916489	103.5796			
568	62425.8	226268	MAS370 _	0	0	2157	350	75008F	6.917176	103.5801			
569	62426.26	226275	MAS370 _	0	0	2157	350	75008F	6.918221	103.5809			
570	62426.77	226287	MAS370 _	288.0582	373.0401	2157	350	75008F	6.918919	103.5815			
571	62427.27	226298	MAS370 _	0	0	2157	350	75008F	6.919965	103.5823			
572	62427.68	226310	MAS370 _	0	0	2157	350	75008F	6.920609	103.5828			
573	62428.23	226318	MAS370 _	0	0	2157	350	75008F	6.921296	103.5833			
574	62428.7	226328	MAS370 _	0	0	2157	350	75008F	6.92232	103.5842	116B		
575	62429.19	226336	MAS370 _	0	0	2157	350	75008F	6.923018	103.5847			
576	62429.7	226348	MAS370 _	0	0	2157	350	75008F	6.924042	103.5856	Last Good ADSB		
577	62430.2	226359	MAS370 _	0	0	2157	350	75008F	6.92468	103.5861		118	
578	62430.66	226367	MAS370 _	0	0	2157	350	75008F	6.925716	103.587			
579	62431.66	226376	MAS370 _	0	0	2157	350	75008F	6.927336	103.5884	118J		
580	62432.2	226388	MAS370 _	0	0	2157	350	75008F	6.928022	103.589	118K		
581	62432.6	226396	MAS370 _	0	0	2157	350	75008F	6.928666	103.5896	118L		
582	62433.1	226407	MAS370 _	0	0	2157	350	75008F	6.929675	103.5904	118M		
583	62433.61	226418	MAS370 _	314.9968	349.9991	2157	350	75008F	6.930275	103.591	118P		
584	62434.15	226428	MAS370 _	0	0	2157	0	75008F	6.931273	103.5919	118T		
585	62434.55	226437	MAS370 _	318.9723	346.977	2157	0	75008F	6.931917	103.5925	120 (LAST ACARS)		
586													
587													
588													
589													

Appendix F – ACARS position report

Traffic Log

From 2014-03-07 12:50:00 to 2014-03-08 2:00:01

Filter: Aircraft registration [MRO]

Time	Trans.	Direction	AN	FI	Medium	Machine	Raw DTG	SMI	Application
Status		Message Type			Source/Destination				
2014-03-07									
17:07:29	46818992	Outgoing Downlink	9M-MRO	MH0370	IOR2	MHKULKJACM001	071707	DFD	FILECNX
Ground Sent		DFD B777 Position Report (NEW) -- (raw)			D:\output\Operations\FLIGHT POSITIONS\07-03-2014.txt				

```
QU CPYXXXX
.DPCCAMH 071707
□DFD
FI MH0370/AN 9M-MRO
DT QXT IOR2 071707 D03A
-  MAS001A0          B777 POSITION REPORT            565

ACID   FLT  FM FLCT   DATE    DPT  DST
MRO    S370 TR  318 07/03/14 WMKK ZBAA

     SWID         SFC
316A-BSM-710-02 18661

 GMT    ALT    CAS  MACH  TAT   SAT     LAT     LONG
164143    103 168.4 .255  31.1   27.3   2.767  101.715
164643  10582 261.8 .478  23.4   10.4   3.074  101.760
165143  21193 301.1 .669  11.6  -11.8   3.553  101.988
165643  28938 303.1 .783   2.6  -27.4   4.109  102.251
170143  34998 278.0 .819 -13.4  -43.9   4.708  102.534
170643  35004 278.4 .821 -13.1  -43.8   5.299  102.813

 GWT   TOTFW  WINDIR WINDSP  THDG
492520  49200  140.3   1.25  -33.5
489200  47800  107.6   9.38   27.3
486240  46500   91.8  19.50   27.8
483840  45400   58.4  10.63   26.0
481880  44500   69.6  17.38   26.8
480600  43800   70.0  17.13   26.7
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