TIME & SOURCE	LUMPUR RADAR - FREQUENCY 132.6 MHz AND RADAR DIRECT LINE COMMUNICATION CONTENT - MAS 370	TIME & SOURCE	AIR-GROUND COMMUNICATION LUMPUR RADAR - FREQUENCY 132.6 MHz AND RADAR DIRECT LINE COMMUNICATION CONTENT - OTHER FLIGHTS
		4724.E7 LITO	START TIME 1730:00 UTC [0130 MYT]
		1731:57 UTC [0131:57 MYT] Lumpur Radar	Global Jet Seven Six clear to Subang Caledonean One Arrival Runway One Five Pibos Transition level four one zero.
		1732:06 UTC [0132:06 MYT] GBG 76	Clear to Subang Caledonean One Arrival Runway One Five emmdaa request descend.
		1732:13 UTC [0132:13 MYT] Lumpur Radar	Global Jet Seven Six descend to flight level one niner zero.
		1732:17 UTC [0132:17 MYT] GBG 76	Descend to flight level one niner zero Global Jet Seven Six.
			Direct Line Telephone Conversation Between KL ACC and Bangkok ACC
		1739:16 UTC [0139:16 MYT]	
		KL ACC	Lumpur.

TIME & SOURCE	AIR-GROUND COMMUNICATION LUMPUR RADAR - FREQUENCY 132.6 MHz AND RADAR DIRECT LINE COMMUNICATION CONTENT - MAS 370	TIME & SOURCE	AIR-GROUND COMMUNICATION LUMPUR RADAR - FREQUENCY 132.6 MHz AND RADAR DIRECT LINE COMMUNICATION CONTENT - OTHER FLIGHTS
		1739:17 UTC [0139:17 MYT] Bangkok ACC	Estimate Kota Bharu on Silk Air Nine Three Seven.
		1739:23 UTC [0139:23 MYT] KL ACC	Silk Air Nine Three Seven go ahead.
		1739:25 UTC [0139:25 MYT] Bangkok ACC	Kota Bharu one nine zero six one nine zero six flight level three nine zero squawk one five one three.
		1739:36 UTC [0139:36 MYT] KL ACC	Okay Silk Air Nine Three Seven Victor Kilo Bravo one niner zero six level three nine zero squawk one niner one three.
		1739:44 UTC [0139:44 MYT] Bangkok ACC	One five one three affirm.
			End of Direct Line Telephone Conversation Between KL ACC and Bangkok ACC

TIME & SOURCE	AIR-GROUND COMMUNICATION LUMPUR RADAR - FREQUENCY 132.6 MHz AND RADAR DIRECT LINE COMMUNICATION CONTENT - MAS 370	TIME & SOURCE	AIR-GROUND COMMUNICATION LUMPUR RADAR - FREQUENCY 132.6 MHz AND RADAR DIRECT LINE COMMUNICATION CONTENT - OTHER FLIGHTS
		1740:11 UTC [0140:11 MYT] GBG 76	(xxxx) [illegible] Global Jet Seven Six request further descend.
		1740:16 UTC [0140:16 MYT] Lumpur Radar	Global Jet Seven Six descend flight level aa one five zero contact Lumpur Radar one two one two five.
		1740:23 UTC [0140:23 MYT] GBG 76	One five zero over one two five Global Jet Seven Six.
1741:23 UTC 0141:23 MYT] Lumpur Radar	Malaysian Three Seven Zero Lumpur Radar how you read, do you read.	<i>i</i> do	
		1742:08 UTC [0142:08 MYT] CES 539	Lumpur Control good morning China Eastern Five Three Niner maintaining level three six zero squawk five one one one.

TIME & SOURCE	AIR-GROUND COMMUNICATION LUMPUR RADAR - FREQUENCY 132.6 MHz AND RADAR DIRECT LINE COMMUNICATION CONTENT - MAS 370	TIME & SOURCE	AIR-GROUND COMMUNICATION LUMPUR RADAR - FREQUENCY 132.6 MHz AND RADAR DIRECT LINE COMMUNICATION CONTENT - OTHER FLIGHTS
		1742:20 UTC [0142:20 MYT] Lumpur Radar	China Eastern Five Three Nine Lumpur Radar identified maintain level three six zero Nipah Three Alfa Arrival Runway Three Two Left Pibos Tran correction Nipah Three Alpha Arrival Runway Three Two Right Pibos Apha Transition.
		1742:35 UTC [0142:35 MYT] CES 539	Nipah Three Alpha Pibos Transition Runway Three Two Right China Southern Five Three Niner.
		1746:21 UTC [0146:21 MYT] CEB 501	Lumpur Radar good morning Cebu Five Zero One.
		1746:28 UTC [0146:28 MYT] Lumpur Radar	Cebu Five Zero One Radar good morning squawk ident and report level.
		1746:38 UTC [0146:38 MYT] CEB 501	And daa Lumpur Radar Cebu Five Zero One

request descend.

TIME &

SOURCE

AIR-GROUND COMMUNICATION
LUMPUR RADAR - FREQUENCY 132.6 MHz
AND RADAR DIRECT LINE COMMUNICATION
CONTENT - MAS 370

AIR-GROUND COMMUNICATION LUMPUR RADAR - FREQUENCY 132.6 MHz AND RADAR DIRECT LINE COMMUNICATION CONTENT - OTHER FLIGHTS

1746:44 UTC [0146:44 MYT] Lumpur Radar	Cebu Five Zero One identified descend level one nine zero Nipah Three Alpha Arrival RunwayThree Two Right Eastan Alpha Transition.
1746:55 UTC [0146:55 MYT] CEB 501	Descend level one niner zero and daa Nipah Three Alpha Arrival Runway Three Two Right Cebu Five Zero One.
1747:08 UTC [0147:08 MYT] CES 539	Lumpur Control China Eastern Five Three Niner request descend.
1747:15 UTC [0147:15 MYT] Lumpur Radar	China Eastern Five Three Niner descend flight level one niner.
1747:19 UTC [0147:19 MYT] CES 539	Descend flight level one niner zero China Eastern Five Three Niner.

TIME &

SOURCE

AIR-GROUND COMMUNICATION LUMPUR RADAR - FREQUENCY 132.6 MHz AND RADAR DIRECT LINE COMMUNICATION CONTENT - MAS 370

AIR-GROUND COMMUNICATION LUMPUR RADAR - FREQUENCY 132.6 MHz AND RADAR DIRECT LINE COMMUNICATION CONTENT - OTHER FLIGHTS

TIME & SOURCE	AND RADAR DIRECT LINE COMMUNICATION CONTENT - MAS 370	TIME & SOURCE	AND RADAR DIRECT LINE COMMUNICATION CONTENT - OTHER FLIGHTS
		1748:09 UTC [0148:09 MYT] Lumpur Radar	Five zero one direct to Nipah.
		1748:13 UTC [0148:13 MYT]	
		5551	Say again where to Cebu Five Zero One you are coming in garble sir.
		1748:17 UTC [0148:17 MYT] Lumpur Radar	Five Zero One track direct Nipah.
		1748:21 UTC [0148:21 MYT] CEB 501	Direct but Cebu Five Zero One.
			Direct Line Telephone Coversation Between KL ACC and HCM ACC
		1749:54 UTC [0149:54 MYT] KL ACC	Ho Chi Minh Lumpur.
		1749:56 UTC [0149:56 MYT]	
		HCM ACC	I transfer IGARI for Malaysian Six One Six Three.

TIME &	AIR-GROUND COMMUNICATION LUMPUR RADAR - FREQUENCY 132.6 MHz AND RADAR DIRECT LINE COMMUNICATION	TIME &	AIR-GROUND COMMUNICATION LUMPUR RADAR - FREQUENCY 132.6 MHz AND RADAR DIRECT LINE COMMUNICATION
SOURCE	CONTENT - MAS 370	SOURCE	CONTENT - OTHER FLIGHTS
		1750:01 UTC [0150:01 MYT] Lumpur Radar	Malaysian eeer Six One Six Three go ahead.
		1750:07 UTC [0150:07 MYT]	ICADI and eight three five flight level request three
		HCM ACC 1750:15 UTC [0150:15 MYT]	IGARI one eight three five flight level request three six zero squawk six three four five.
		KL ACC	Malaysian Six One Six Three IGARI one eight three five flight level three six zero is approved squawk six three four five.
		1750:23 UTC [0150:23 MYT]	
		HCM ACC	Okay transfer three six zero for Malaysian Six One Six Three.
1750:27 UTC [0150:27 MYT] KL ACC	Affirm and confirm still negative contact with Malaysian Three Seven Zero.		
1750:32 UTC [0150:32 MYT] HCM ACC	Affirm negative contact.		
	-		

AIR-GROUND COMMUNICATION LUMPUR RADAR - FREQUENCY 132.6 MHz

TIME & SOURCE

AIR-GROUND COMMUNICATION LUMPUR RADAR - FREQUENCY 132.6 MHz AND RADAR DIRECT LINE COMMUNICATION **CONTENT - OTHER FLIGHTS**

KL ACC

TIME & AND RADAR DIRECT LINE COMMUNICATION **SOURCE CONTENT - MAS 370**

1750:34 UTC [0150:34 MYT]

Err... okay thank you advise me...

1750:38 UTC [0150:38 MYT]

HCM ACC Okay.

> **End Of Direct Line Coversation** Between KL ACC and HCM ACC

> > 1751:06 UTC [0151:06 MYT]

Lumpur Radar China Eastern Five Three Niner direct to Nipah and

descend level one niner zero.

1751:13 UTC [0151:13 MYT]

CES 539 Direct to Nipah and descend to level one niner zero

China Eastern Five Three Niner.

1751:19 UTC [0151:19 MYT]

Lumpur Radar China Eastern Five Zero Niner Three contact

Singapore one two three decimal seven.

1751:26 UTC [0151:26 MYT]

CES 5093 One two three decimal seven err... good night

China Eastern Five Zero Nine Three.

TIME &

SOURCE

AIR-GROUND COMMUNICATION
LUMPUR RADAR - FREQUENCY 132.6 MHz
AND RADAR DIRECT LINE COMMUNICATION
CONTENT - MAS 370

AIR-GROUND COMMUNICATION
LUMPUR RADAR - FREQUENCY 132.6 MHz
AND RADAR DIRECT LINE COMMUNICATION
CONTENT - OTHER FLIGHTS

SOURCE	CONTENT - OTHER FLIGHTS
1751:36 UTC [0151:36 MYT] Lumpur Radar	Cebu Five Zero One descend flight level one five zero.
1751:40 UTC [0151:40 MYT] CEB 5093	Descend flight level one five zero Cebu Five Zero One.
1752:46 UTC [0152:46 MYT] Lumpur Radar	Cebu Five Zero One speed three zero zero or greater.
1752:51 UTC [0152:51 MYT] CEB 501	Three zero zero or greater Cebu Five Zero One.
1753:04 UTC [0153:04 MYT] Lumpur Radar	Cebu Five Cebu Five Zero One contact Lumpur Radar one two one two five.
1753:10 UTC [0153:10 MYT] SIA 501	One two one two five good day.

AIR-GROUND COMMUNICATION

TIME &

SOURCE

AIR-GROUND COMMUNICATION LUMPUR RADAR - FREQUENCY 132 6 MHz

TIME & SOURCE	LUMPUR RADAR - FREQUENCY 132.6 MHz AND RADAR DIRECT LINE COMMUNICATION CONTENT - MAS 370	TIME & SOURCE	LUMPUR RADAR - FREQUENCY 132.6 MHz AND RADAR DIRECT LINE COMMUNICATION CONTENT - OTHER FLIGHTS
		1754:40 UTC [0154:40 MYT] Lumpur Radar	China Eastern Five Three Niner contact Lumpur Radar one two one two five.
		1754:45 UTC [0154:45 MYT] CES 539	One two one two five China Eastern Five Three Nine good day.
		1801:46 UTC [0201:46 MYT] MAS 386	Lumpur Control Malaysian Three Eight Six passing one flight level one two four for flight level one eight zero.
		1801:56 UTC [0201:56 MYT] Lumpur Radar 1802:01 UTC [0202:01 MYT] MAS 386	Three Eight Six Lumpur radarGood morning climb flight level two one zero. Level two one zero Malaysian Three Eight Six.
		1803:04 UTC [0203:04 MYT] Lumpur Radar	Malaysian Three Eight Six climb initially flight level three three zero.

TIME & SOURCE	AIR-GROUND COMMUNICATION LUMPUR RADAR - FREQUENCY 132.6 MHz AND RADAR DIRECT LINE COMMUNICATION CONTENT - MAS 370	TIME & SOURCE	AIR-GROUND COMMUNICATION LUMPUR RADAR - FREQUENCY 132.6 MHz AND RADAR DIRECT LINE COMMUNICATION CONTENT - OTHER FLIGHTS
		1803:09 UTC 0203:09 MYT [MAS 386]	Level three six zero initially Malaysian Three Eight Six.
		1803:13 UTC [0203:13 MYT] Lumpur Radar	Malaysian Three Eight Six initially flight level three three zero.
		1803:16 UTC [0203:16 MYT] MAS 386	Initially flight level three three zero Malaysian Three Eight Six.

TELEPHONE CONVERSATION

1803:34 UTC [0203:34] MYT KL ACC	Ah okay okay okay carry on I tell Singa Ho Chi Minh la we told the airline to contact.
1803:38 UTC [0203:38 MYT]	Direct line telephone ringing tone.
1803:41 UTC [0203:41 MYT] KL ACC	Good night.

AIR-GROUND COMMUNICATION LUMPUR RADAR - FREQUENCY 132.6 MHz

AIR-GROUND COMMUNICATION
LUMPUR RADAR - FREQUENCY 132.6 MHz
AND RADAR DIRECT LINE COMMUNICATION
CONTENT - OTHER FLIGHTS

TIME & AND RADAR DIRECT LINE COMMUNICATION TIME & SOURCE CONTENT - MAS 370 SOURCE

1803:48 UTC [0203:48 MYT] KL ACC Helo. 1803:49 UTC [0203:49 MYT] KL ACC Ho Chi Minh. 1803:50 UTC [0203:50 MYT] **HCM ACC** Yes sir. 1803:51 UTC [0203:51 MYT] KL ACC Any news for Malaysian Three Seven Zero. 1803:54 UTC [0203:54 MYT] **HCM ACC** Negative sir until now they probably out of radar. 1803:57 UTC [0203:57 MYT] KL ACC Okay. 1803:58 UTC [0203:58 MYT] **HCM ACC** We have no information about Malaysian Three Seven

Zero right now.

AIR-GROUND COMMUNICATION LUMPUR RADAR - FREQUENCY 132.6 MHz

AIR-GROUND COMMUNICATION
LUMPUR RADAR - FREQUENCY 132.6 MHz
AND RADAR DIRECT LINE COMMUNICATION
CONTENT - OTHER FLIGHTS

TIME & AND RADAR DIRECT LINE COMMUNICATION SOURCE CONTENT - MAS 370

TIME & SOURCE

1804:02 UTC
[0204:02 MYT]
KL ACC Okay Malaysian.

1804:03 UTC
[0204:03 MYT]
HCM ACC No radar target yeah.

1804:05 UTC
[0204:05 MYT]
KL ACC No radar target confirm.

1804:07 UTC [0204:07 MYT] HCM ACC

ICM ACC Standby.

1804:08 UTC [0204:08 MYT]

KL ACC You don't have radar contact.

1804:12 UTC [0204:12 MYT]

HCM ACC Go ahead sir.

1804:13 UTC [[0204:13 MYT]

KL ACC No confirm you don't have any radar contact.

TIME & SOURCE	AIR-GROUND COMMUNICATION LUMPUR RADAR - FREQUENCY 132.6 MHz AND RADAR DIRECT LINE COMMUNICATION CONTENT - MAS 370	TIME & SOURCE	AIR-GROUND COMMUNICATION LUMPUR RADAR - FREQUENCY 132.6 MHz AND RADAR DIRECT LINE COMMUNICATION CONTENT - OTHER FLIGHTS
1804:17 UTC [0204:17 MYT] HCM ACC	Yeah no radar contact no ADSB contact no communication.		
		1804:23 UTC [0204:23 MYT] THA 483	Lumpur Control Thai Four Eight Three good evening.
	DIRECT LINE TELEPHONE CONVERSATION INTERRUPTED BY AIRCRAFT CALLING		
1804:25 UTC [0204:25 MYT] KL ACC	Eer Standby please.		
NE 7.00	Lor Grandby product.	THA 483	Squawking six one one four.
		1804:30 UTC [0204:30 MYT] Lumpur Radar	Thai Four Eight Three Lumpur Radar identified maintain level three seven zero.
		1804:33 UTC [0204:33 MYT]	

Maintain level three seven zero Thai Four Eight Three.

THA 483

AIR-GROUND COMMUNICATION
LUMPUR RADAR - FREQUENCY 132.6 MHz

AIR-GROUND COMMUNICATION
LUMPUR RADAR - FREQUENCY 132.6 MHz
AND RADAR DIRECT LINE COMMUNICATION

CONTENT - OTHER FLIGHTS

TIME & SOURCE

AND RADAR DIRECT LINE COMMUNICATION
CONTENT - MAS 370

TIME & SOURCE

CONTINUE DIRECT LINE CONVERSATION WITH HO CHI MINH

1804:36 UTC

[0204:36 MYT]

KL ACC Okay Ho Chi Minh.

1804:38 UTC

[0204:38 MYT]

HCM ACC Yes sir.

1804:39 UTC

[0204:39 MYT]

KL ACC Okay reference to the... company Malaysian

Airlines the aircraft is still flying is over somewhere

over Cambodia.

1804:50 UTC

[0204:50 MYT]

HCM ACC Somewhere over Cambodia.

1804:51 UTC

[0204:51 MYT]

KL ACC Affirm.

1804:52 UTC

[0204:52 MYT]

HCM ACC That's mean not enter our FIR.

AIR-GROUND COMMUNICATION
LUMPUR RADAR - FREQUENCY 132.6 MHz

AND RADAR DIRECT LINE COMMUNICATION

CONTENT - MAS 370

TIME & SOURCE

AIR-GROUND COMMUNICATION
LUMPUR RADAR - FREQUENCY 132.6 MHz
AND RADAR DIRECT LINE COMMUNICATION
CONTENT - OTHER FLIGHTS

1804:58 UTC

TIME &

SOURCE

[0204:58 MYT]

KL ACC Okay I am not very sure about that but daa... this is

what the airlines represent MAS said that the aircraft ...

1805:05 UTC

[0205:05 MYT]

HCM ACC Okay okay let me check with Cambodia.

1805:08 UTC

[0205:08 MYT]

KL ACC Yeap please check with Cambodia please.

1805:09 UTC

[0205:09 MYT]

HCM ACC Yeah.

1805:10 UTC

[0205:10 MYT]

KL ACC Okay and call me back.

End of Direct Line Telephone Conversation
Between KL ACC and HCM ACC

1809:35 UTC [0209:35 MYT]

TGW 2657 Lumpur Control GoCat Two Six Five Seven good

morning we are flight level three five zero squawking

four seven zero four over Victor KIlo Bravo.

TIME & SOURCE	AIR-GROUND COMMUNICATION LUMPUR RADAR - FREQUENCY 132.6 MHz AND RADAR DIRECT LINE COMMUNICATION CONTENT - MAS 370	TIME & SOURCE	AIR-GROUND COMMUNICATION LUMPUR RADAR - FREQUENCY 132.6 MHz AND RADAR DIRECT LINE COMMUNICATION CONTENT - OTHER FLIGHTS
		1809:46 UTC [0209:46] MYT Lumpur Radar	GoCat Two Six Five Seven Lumpur Radar identified maintain flight level four three seven correction three five zero.
		1809:53 UTC [0209:53 MYT] TGW 2657	Maintain GoCat Two Six Five Seven.
		1815:27 UTC [0215:27 MYT] CCA 405	Lumpur Control ah good morning China Four Zero Four maintain level two eight zero.
		1815:34 UTC [0215:34 MYT] Lumpur Radar	Air China Four Zero Four Lumpur Radar confirm squawk.
		1815:38 UTC [0215:38 MYT] CCA 405	Squawk two two one seven.
		1815:41 UTC [0215:41 MYT] Lumpur Radar	Air China Four Zero Four identified climb level three four zero.

ICAO Airline Designator for Malaysia Airlines: MAS

SAFETY INVESTIGATION REPORT MH370 (9M-MRO)

AIR-GROUND COMMUNICATION LUMPUR RADAR - FREQUENCY 132 6 MHz

AIR-GROUND COMMUNICATION LUMPUR RADAR - FREQUENCY 132 6 MHz

TIME & SOURCE	AND RADAR DIRECT LINE COMMUNICATION CONTENT - MAS 370	TIME & SOURCE	AND RADAR - FREQUENCY 132.6 MHz AND RADAR DIRECT LINE COMMUNICATION CONTENT - OTHER FLIGHTS
		1815:46 UTC [0215:46 MYT] CCA 405	Climb to three our zero Air China Four Zero Four.
		1816:05 UTC [0216:05 MYT]	Sound of telephone ringing.
		1816:13 UTC [0216:13 MYT] Source unknown	Helo.
		1816:17 UTC [0216:17 MYT] Source unknown	Helo.
		1816:21 UTC [0216:21 MYT]	Telephone line cut-off tone TOO TOO TOO.
		1816:30 UTC [0216:30 MYT]	End of Telephone line cut-off tone.
		1816:36 UTC [0216:36 MYT] THA 465	Lumpur Control Thai Four Six Five good morning maintaining flight level three seen zero.
		1816:46 UTC [0216:46 MYT] Lumpur Radar	Thai Four Six Five Lumpur squawk ident.
		Page 18 of 125	Malaysia Time [MYT] - UTC + 8 hours

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TIME &

AIR-GROUND COMMUNICATION LUMPUR RADAR - FREQUENCY 132.6 MHz AND RADAR DIRECT LINE COMMUNICATION CONTENT - MAS 370

AIR-GROUND COMMUNICATION LUMPUR RADAR - FREQUENCY 132.6 MHz AND RADAR DIRECT LINE COMMUNICATION CONTENT - OTHER FLIGHTS

SOURCE	CONTENT - MAS 370	SOURCE	CONTENT - OTHER FLIGHTS
		1816:49 UTC [0216:49 MYT] THA 465	Squawk six one one six idening Thai Four Six Five.
		1817:01 UTC [0217:01 MYT] Lumpur Radar	Four Six Five identified mainain level daathree seven zero.
		1817:06 UTC [0217:06 MYT] THA 465	Maintain flight level three seven zero Thai Four Six Five.
		1817:10 UTC [0217:10 MYT] Lumpur Radar	Malaysian Three Eight Six climb initially level three four zero.
		1817:19 UTC [0217:19 MYT] Lumpur Radar	Malaysian Three Eight Six climb initially level three four zero.
		1817:22 UTC [0217:22 MYT] MAS 386	To three four zero Malaysian Three Eight Six.

TIME &

TIME &

SOURCE

AIR-GROUND COMMUNICATION
LUMPUR RADAR - FREQUENCY 132.6 MHz
AND RADAR DIRECT LINE COMMUNICATION
CONTENT - MAS 370

AIR-GROUND COMMUNICATION
LUMPUR RADAR - FREQUENCY 132.6 MHz
AND RADAR DIRECT LINE COMMUNICATION
CONTENT - OTHER FLIGHTS

TIME & SOURCE **CONTENT - OTHER FLIGHTS** 1820:24 UTC [0220:24 MYT] MAS 386 Three Eight Six maintaining flight level three four zero request higher. 1820:32 UTC [0220:32 MYT] Lumpur Radar Three Eight Six standby. **Direct Line Telephone Conversation** Between KL ACC and Bangkok ACC 1821:50 UTC [0221:50 MYT] KL ACC Yeah Bangkok. 1821:51 UTC [0221:51 MYT] Bangkok ACC Helo three estimates Kota Bharu. 1821:53 UTC [0221:53 MYT] Source unknown Songkran around. 1822:02 UTC [0222:02 MYT]

Okay Bangkok go ahead.

KL ACC

TIME &

SOURCE

AID-COMMUNICATION

AIR-GROUND COMMUNICATION LUMPUR RADAR - FREQUENCY 132.6 MHz AND RADAR DIRECT LINE COMMUNICATION **CONTENT - OTHER FLIGHTS**

AIR-GROUND COMMUNICATION
LUMPUR RADAR - FREQUENCY 132.6 MHz
AND RADAR DIRECT LINE COMMUNICATION
CONTENT - MAS 370

SOURCE	CONTENT - OTHER FLIGHTS
1822:04 UTC [0222:04 MYT] Bangkok ACC	First one Zero One Cargo Five Three Zero.
1822:08 UTC [0222:08 MYT] KL ACC	Go ahead.
1822:10 UTC [0222:10 MYT] Bangkok ACC	Kota Bharu one nine one five flight level three five zero squawk six one one seven.
1822:18 UTC [0222:18 MYT] KL ACC	Next.
1822:19 UTC [0222:19 MYT] Bangkok ACC	Silk Air Five Zero Nine.
1822:22 UTC [0222:22 MYT] KL ACC	Go ahead.
1822:24 UTC [0222:24 MYT]	

squawk seven four zero two.

Bangkok ACC

TIME &

SOURCE

Kota Bharu one nine four two flight level three five zero

AIR-GROUND COMMUNICATION LUMPUR RADAR - FREQUENCY 132.6 MHz AND RADAR DIRECT LINE COMMUNICATION CONTENT - MAS 370

AIR-GROUND COMMUNICATION LUMPUR RADAR - FREQUENCY 132.6 MHz AND RADAR DIRECT LINE COMMUNICATION CONTENT - OTHER FLIGHTS

TIME & SOURCE	AND RADAR DIRECT LINE COMMUNICATION CONTENT - MAS 370	TIME & SOURCE	AND RADAR DIRECT LINE COMMUNICATION CONTENT - OTHER FLIGHTS
		1822:31 UTC [0222:31 MYT]	
		KL ACC	Next.
		1822:31 UTC	
		[0222:31 MYT]	
		Bangkok ACC	Last one Singapore Four Four Seven.
		1822:35 UTC	
		[0222:35 MYT]	
		KL ACC	Go ahead.
		1822:37 UTC	
		[0222:37 MYT]	
		Bangkok ACC	Two zero one three flight level three nine zero squawk four seven five one.
		1822:43 UTC [0222:43 MYT]	
		KL ACC	Okay I read back er (xxx) [illegible] Cargo Five Three Zero Kota Bharu one nine one five flight level three five zero squawk six one one seven, Silk Air Five Two Niner Kota Bharu one nine four two flight level three five zero squawk seven four zero two and last one Singapore Four Four Seven IGARI two zero one six one three flight level three niner zero squawk four seven five one confirm.

AIR-GROUND COMMUNICATION
LUMPUR RADAR - FREQUENCY 132.6 MHz
AND RADAR DIRECT LINE COMMUNICATION
CONTENT - MAS 370

AIR-GROUND COMMUNICATION LUMPUR RADAR - FREQUENCY 132.6 MHz AND RADAR DIRECT LINE COMMUNICATION CONTENT - OTHER FLIGHTS

TIME & SOURCE	AND RADAR DIRECT LINE COMMUNICATION CONTENT - MAS 370	TIME & SOURCE	AND RADAR DIRECT LINE COMMUNICATION CONTENT - OTHER FLIGHTS
		1823:04 UTC [0223:04 MYT]	
		Bangkok ACC	Yes the second one is Silk Air Five Zero Niner.
		1823:07 UTC [0223:07 MYT]	
		KL ACC	Five Silk Air Five Zero Niner copied.
		1823:09 UTC [0223:09 MYT]	
		Bangkok ACC	Affirm thank you.
			End of Direct Line Telephone Conversation Between KL ACC and Bangkok ACC
		1823:16 UTC [0223:16 MYT]	
		Lumpur Radar	Malaysian Three Five Zero climb level three five zero.
		1823:20 UTC [0223:20 MYT]	
		Lumpur Radar	Malaysian Three Eight Six climb level three five zero.
		1823:22 UTC [0223:22 MYT]	
		MAS 386	Three five zero Malaysian Three Eight Six.

TIME &

AIR-GROUND COMMUNICATION LUMPUR RADAR - FREQUENCY 132.6 MHz AND RADAR DIRECT LINE COMMUNICATION CONTENT MAC 270

AIR-GROUND COMMUNICATION LUMPUR RADAR - FREQUENCY 132.6 MHz AND RADAR DIRECT LINE COMMUNICATION CONTENT OTHER ELICHTS

SOURCE	CONTENT - MAS 370	SOURCE	CONTENT - OTHER FLIGHTS
		1823:26 UTC [0223:26 MYT] Lumpur Radar	Malaysian Three Eight Six expect igher later by Ho Chi Minh.
		1823:29 UTC [0223:29 MYT] MAS 386	Malaysian Three Eight Six.
		1827:06 UTC [0227:06 MYT] Lumpur Radar	Thai Four Eight Three contact Singapore one two three decimal seven.
		1827:09 UTC [0227:09 MYT] THA 483	Singapore one two three decimal seven Thai Four Eight Three.
		1830:40 UTC [0230:40 MYT] Lumpur Radar	Thai Four Six Five contact Singapore one two three decimal seven.
		1830:45 UTC [0230:45 MYT] THA 465	One two three decimal seven Thai Four Six Five.

TIME &

AIR-GROUND COMMUNICATION LUMPUR RADAR - FREQUENCY 132.6 MHz AND RADAR DIRECT LINE COMMUNICATION CONTENT - MAS 370

AIR-GROUND COMMUNICATION
LUMPUR RADAR - FREQUENCY 132.6 MHz
AND RADAR DIRECT LINE COMMUNICATION
CONTENT - OTHER FLIGHTS

TIME & SOURCE	AND RADAR DIRECT LINE COMMUNICATION CONTENT - MAS 370	TIME & SOURCE	AND RADAR DIRECT LINE COMMUNICATION CONTENT - OTHER FLIGHTS
		1832:23 UTC [0232:23 MYT] MAS 6163	Lumpur Six One SixThree morning.
		1832:32 UTC [0232:32 MYT]	
		MAS 6163	Lumpur Malaysian Six One Six Three.
		1832:42 UTC [0232:42 MYT] MAS 6163	Lumpur Malaysian Six One Six Three one three four two five.
		1832:46 UTC [0232:46 MYT] Lumpur Radar	Malaysian Six One Six Three Lumpur Radar firm squawk and level.
		1832:51 UTC [0232:51 MYT] MAS 6163	Level three six zero squawking six three four five Malaysian Six One Six Three.
		1832:57 UTC [0232:57 MYT] Lumpur Radar	Malaysian Six One Six Three identified maintain level three six zero.

TIME &	AIR-GROUND COMMUNICATION LUMPUR RADAR - FREQUENCY 132.6 MHz AND RADAR DIRECT LINE COMMUNICATION	TIME &	AIR-GROUND COMMUNICATION LUMPUR RADAR - FREQUENCY 132.6 MHz AND RADAR DIRECT LINE COMMUNICATION
SOURCE	CONTENT - MAS 370	SOURCE	CONTENT - OTHER FLIGHTS
		1833:00 UTC [0233:00 MYT] MAS 6163	Roger Malaysian Six One Six Three.
		1833:18 UTC [0233:18 MYT] Lumpur Radar	Malaysian Three Eight Six contact Ho Chi Minh one two zero decimal niner.
		1833:22 UTC [0233:22 MYT] MAS 386	One two zero decimal nine Malaysian Three Eight Six.
		1833:26 UTC [0233:26 MYT] Lumpur Radar	GoCat Two Six Five Seven contact Singapore one two
		zampai Radai	three decimal seven.
		1833:31 UTC [0233:31 MYT] TGW 2657	One two three decimal seven GoCat Two Six Five Seven.
1833:50 UTC [0233:50 MYT]	LUMPUR RADAR DAILING TELEPHONE LINE		
1833:53 UTC [0233:53 MYT]	Telephone ringing tone.		

AIR-GROUND COMMUNICATION LUMPUR RADAR - FREQUENCY 132.6 MHz

AIR-GROUND COMMUNICATION LUMPUR RADAR - FREQUENCY 132.6 MHz AND RADAR DIRECT LINE COMMUNICATION **CONTENT - OTHER FLIGHTS**

TIME & **SOURCE**

TIME & AND RADAR DIRECT LINE COMMUNICATION **CONTENT - MAS 370**

SOURCE

1833:59 UTC

[0233:59 MYT]

MAS Operations Helo.

1834:00 UTC

0234:00 MYT

KL ACC Okay aah... helo good good mor morning.

1834:02 UTC

[0234:02 MYT]

MAS Operations Yeah yeah.

1834:03 UTC

[0234:03 MYT]

KL ACC Calling from Subang Centre lah.

1834:06 UTC

[0234:06 MYT]

MAS Operations err... ya.

1834:07 UTC

[0234:07 MYT]

KL ACC This is MAS Operations is it.

1834:09 UTC

[0234:09 MYT]

MAS Operations Ya ya

AIR-GROUND COMMUNICATION LUMPUR RADAR - FREQUENCY 132.6 MHz

AIR-GROUND COMMUNICATION
LUMPUR RADAR - FREQUENCY 132.6 MHz
AND RADAR DIRECT LINE COMMUNICATION
CONTENT - OTHER FLIGHTS

TIME & AND RADAR DIRECT LINE COMMUNICATION SOURCE CONTENT - MAS 370

1834:10 UTC [0234:10 MYT]

KL ACC Okay err.... regarding your Malaysian Three Seven Zero.

1834:13 UTC [0234:13 MYT]

MAS Operations Herha.

1834:14 UTC [0234:14 MYT]

KL ACC Ho Chi Minh said still negative contact.

1834:17 UTC [0234:17 MYT]

MAS Operations Haa.

1834:17 UTC [0234:17 MYT]

KL ACC And the no radar target at all.

1834:20 UTC [0234:20 MYT]

MAS Operations Okay.

1834:21 UTC [0234:21 MYT]

KL ACC But earlier we checked with MAS I think your side

somebody said that the aircraft still flying and you

already send signal to the aircraft.

TIME &

SOURCE

AIR-GROUND COMMUNICATION LUMPUR RADAR - FREQUENCY 132.6 MHz

AIR-GROUND COMMUNICATION LUMPUR RADAR - FREQUENCY 132.6 MHz AND RADAR DIRECT LINE COMMUNICATION **CONTENT - OTHER FLIGHTS**

TIME & **SOURCE**

TIME & AND RADAR DIRECT LINE COMMUNICATION **CONTENT - MAS 370** SOURCE

1834:29 UTC [0234:29 MYT] MAS Operations Ya.

1834:30 UTC [0234:30 MYT]

KL ACC Okay and daa... what is daa... I mean did they reply to

you or not.

1834:34 UTC [0234:34 MYT]

MAS Operations No no no they never reply.

1834:36 UTC [0234:36 MYT]

KL ACC Malaysian Three Seven Zero.

1834:37 UTC [0234:37 MYT]

MAS Operations Hmm ya.

1834:38 UTC [0234:38 MYT]

KL ACC But daa...how do you know that they ooo...ya...

1834:41 UTC [0234:41 MYT]

MAS Operations Because of the.... message went through successfully.

AIR-GROUND COMMUNICATION LUMPUR RADAR - FREQUENCY 132.6 MHz

AIR-GROUND COMMUNICATION
LUMPUR RADAR - FREQUENCY 132.6 MHz
AND RADAR DIRECT LINE COMMUNICATION
CONTENT - OTHER FLIGHTS

TIME & AND RADAR DIRECT LINE COMMUNICATION SOURCE CONTENT - MAS 370

TIME & SOURCE

1834:44 UTC

[0234:44 MYT]

KL ACC Successfully went through.

1834:45 UTC

[0234:45 MYT]

MAS Operations Aaa...

1834:46 UTC

[0234:46 MYT]

KL ACC Okay amm.... can you I mean is there (xxx) [illegble] any

possible for the aircraft to answer you.

1834:53 UTC

[0234:53 MYT]

MAS Operations Eer...

1834:54 UTC

[0234:54 MYT]

KL ACC Anyway aircraft can answer you.

1834:58 UTC

[0234:58 MYT]

MAS Operations Do know daa.... You have to try the SATCOM la sir.

1835:02 UTC

[0235:02 MYT]

KL ACC hmm hamm.

AIR-GROUND COMMUNICATION LUMPUR RADAR - FREQUENCY 132.6 MHz

AIR-GROUND COMMUNICATION
LUMPUR RADAR - FREQUENCY 132.6 MHz
AND RADAR DIRECT LINE COMMUNICATION
CONTENT - OTHER FLIGHTS

TIME & AND RADAR DIRECT LINE COMMUNICATION SOURCE CONTENT - MAS 370

TIME & SOURCE

1835:02 UTC

[0235:02 MYT]

MAS Operations Will try the SATCOM and see.

1835:03 UTC

[0235:03 MYT]

KL ACC Okay.

1835:05 UTC

[0235:05 MYT]

KL ACC Hah hah see whether they can I am sure whether the

position or whether they contact with anyone and the

estimate for landing or anything.

1835:13 UTC

[0235:13 MYT]

MAS Operations Okay.

1835:14 UTC

[0235:14 MYT]

KL ACC Okay and daa okay daa because da Ho Chi Minh

still worry because they have eercompletely no contact

at all either radio or radar.

1835:26 UTC

[0235:26 MYT]

MAS Operations Okay.

AIR-GROUND COMMUNICATION LUMPUR RADAR - FREQUENCY 132.6 MHz

AIR-GROUND COMMUNICATION
LUMPUR RADAR - FREQUENCY 132.6 MHz
AND RADAR DIRECT LINE COMMUNICATION
CONTENT - OTHER FLIGHTS

TIME & SOURCE

AND RADAR DIRECT LINE COMMUNICATION
CONTENT - MAS 370

TIME & SOURCE

1835:27 UTC [0235:27 MYT]

KL ACC Okay so.

1835:29 UTC [0235:29 MYT]

MAS Operations Can fax them the...because is still down loading the.....

aircraft movement.

1835:35 UTC [0235:35 MYT]

KL ACC Ah huh.

1835:36 UTC [0235:36 MYT]

MAS Operations Aircraft still sending the ... movement message.

1835:38 UTC [0235:38 MYT]

KL ACC Okay.

1835:39 UTC [0235:39 MYT]

MAS Operations Positioning message.

1835:40 UTC [0235:40 MYT]

KL ACC Positioning message okay okay aah....

AIR-GROUND COMMUNICATION LUMPUR RADAR - FREQUENCY 132.6 MHz

AIR-GROUND COMMUNICATION
LUMPUR RADAR - FREQUENCY 132.6 MHz
AND RADAR DIRECT LINE COMMUNICATION
CONTENT - OTHER FLIGHTS

TIME & AND RADAR DIRECT LINE COMMUNICATION SOURCE CONTENT - MAS 370

TIME & SOURCE

1835:43 UTC

[0235:43 MYT]

MAS Operations Roughly aaa... somewhere Vietnam.

1835:46 UTC

[0235:46 MYT]

KL ACC Okay can you tell what is the last position aircraft

passed now.

1835:52 UTC

[0235:52 MYT]

MAS Operations Is the last position was eer...Lat Long fourteen fourteen

point nine zero zero zero zero.

1836:06 UTC

[0236:06 MYT]

KL ACC Eer... say again please.

1836:07 UTC

[0236:07 MYT]

MAS Operations Eer... Latitude is fourteen point nine eer....

1836:11 UTC

[0236:11 MYT]

KL ACC eeh eeh

1836:12 UTC

[0236:12 MYT]

MAS Operations Zero zero zero.

AIR-GROUND COMMUNICATION LUMPUR RADAR - FREQUENCY 132.6 MHz

AIR-GROUND COMMUNICATION
LUMPUR RADAR - FREQUENCY 132.6 MHz
AND RADAR DIRECT LINE COMMUNICATION
CONTENT - OTHER FLIGHTS

LUMPUR RADAR - FREQUENCY 132.6 MHz
AND RADAR DIRECT LINE COMMUNICATION
CONTENT - MAS 370

TIME & SOURCE

1836:15 UTC [0236:15 MYT]

TIME &

SOURCE

KL ACC Four, four time zero.

1836:16 UTC [0236:16 MYT]

MAS Operations Yeah.

1836:18 UTC [0236:18 MYT]

KL ACC Okay.

1836:19 UTC [0236:19 MYT]

MAS Operations Longtitude is one zero niner.

1836:22 UTC [0236:22 MYT]

KL ACC One zero nine.

1836:24 UTC [0236:24 MYT]

MAS Operations One five five zero zero.

1836:25 UTC [0236:25 MYT]

KL ACC One five zero zero at what time please.

AIR-GROUND COMMUNICATION LUMPUR RADAR - FREQUENCY 132.6 MHz

AIR-GROUND COMMUNICATION
LUMPUR RADAR - FREQUENCY 132.6 MHz
AND RADAR DIRECT LINE COMMUNICATION
CONTENT - OTHER FLIGHTS

TIME & SOURCE

AND RADAR DIRECT LINE COMMUNICATION TIME &

CONTENT - MAS 370 SOURCE

1836:28 UTC [0236:28 MYT]

MAS Operations At one eight three three five six.

1836:30 UTC [0236:30 MYT]

KL ACC One eight three three huh.

1836:32 UTC [0236:32 MYT]

MAS Operations Auh.

1836:32 UTC [0236:32 MYT]

KL ACC Okay this is the position aircraft passed by one eight

three three uh.

1836:36 UTC [0236:36 MYT]

MAS Operations Huh

1836:37 UTC [0236:37 MYT]

KL ACC Okay aah... this one let them call okay and daaadvise

okay you try to raise the aircraft and then like aah... I mean to reply you whether they are eer... contact any

of the ATC unit along unit or not.

AIR-GROUND COMMUNICATION LUMPUR RADAR - FREQUENCY 132.6 MHz

AIR-GROUND COMMUNICATION
LUMPUR RADAR - FREQUENCY 132.6 MHz
AND RADAR DIRECT LINE COMMUNICATION
CONTENT - OTHER FLIGHTS

TIME & SOURCE

AND RADAR DIRECT LINE COMMUNICATION
CONTENT - MAS 370

TIME & SOURCE

1836:55 UTC [0236:55 MYT]

MAS Operations Alright.

1836:56 UTC

[0236:56 MYT]

KL ACC Okay please thank you.

1837:00 UTC

[0237:00 MYT] Tone of telephone cut off too too too.

End of Direct Line Conversation
Between KL ACC and MAS Operations Centre

1837:15 UTC

[0237:15 MYT] Direct line ringing tone.

1837:21 UTC

0237:21 MYT]

KL ACC They will try [back ground conversation]

1837:24 UTC

[0237:24 MYT]

KL ACC Aircraft still flying it seem [back ground conversation]

1837:25 UTC

[0237:25 MYT] **Telephone ringing at this time.**

AIR-GROUND COMMUNICATION LUMPUR RADAR - FREQUENCY 132.6 MHz

	LOWI ON NADAN TREGOENOT TOZIO MITZ	
TIME &	AND RADAR DIRECT LINE COMMUNICATION	TIME &
SOURCE	CONTENT - MAS 370	SOURCE

1837:34 UTC [0237:34 MYT] HCM ACC	Yes.
1837:35 UTC [0237:35 MYT] KL ACC	Okay Ho Chi Minh.
1837:36 UTC [0237:36 MYT] HCM ACC	Sir.
1837:37 UTC [0237:37 MYT] KL ACC	The Malaysian Three Seven Zero.
1837:40 UTC [0237:40 MYT] HCM ACC	Yes.
1837:41 UTC [0237:41 MY] KL ACC	Okay aircraft is eer still flying and then keep on sending position report to the company.
1837:49 UTC [0237:49 MYT] HCM ACC	Yeah.

AIR-GROUND COMMUNICATION
LUMPUR RADAR - FREQUENCY 132.6 MHz

AIR-GROUND COMMUNICATION
LUMPUR RADAR - FREQUENCY 132.6 MHz
AND RADAR DIRECT LINE COMMUNICATION
CONTENT - OTHER FLIGHTS

TIME & AND RADAR DIRECT LINE COMMUNICATION SOURCE CONTENT - MAS 370

TIME & SOURCE

1837:49 UTC

[0237:49 MYT]

KL ACC Okay.

1837:50 UTC

[0237:50 MYT]

HCM ACC The aircraft is landing at (xxxx) [illegible]

1837:52 UTC

[0237:52 MYT]

KL ACC Say again.

1837:53 UTC

[0237:53 MYT]

HCM ACC Say again say again for Malaysian Three Seven Zero.

1837:56 UTC

[0237:56 MYT]

KL ACC Affirm Malaysian Three Seven Zero still flying aircraft

keep sending position report to the airline okay to the company okay it last at time one eight three at time one eight three three aircraft passed position one

eer... one four nine zero zero zero zero.

1838:18 UTC

[0238:18 MYT]

HCM ACC Yes.

AIR-GROUND COMMUNICATION LUMPUR RADAR - FREQUENCY 132.6 MHz

AIR-GROUND COMMUNICATION
LUMPUR RADAR - FREQUENCY 132.6 MHz
AND RADAR DIRECT LINE COMMUNICATION
CONTENT - OTHER FLIGHTS

TIME & AND RADAR DIRECT LINE COMMUNICATION
SOURCE CONTENT - MAS 370

SOURCE 1838:19 UTC [0238:19 MYT] KL ACC And the... one zero nine east one five zero zero. 1838:25 UTC [0238:25 MYT] **HCM ACC** Five zero zero. 1838:26 UTC [0238:26 MYT] **KL ACC** Yeah affirm. 1838:27 UTC [0238:27 MYT] **HCM ACC** Say again the first one, one four nine. 1838:29 UTC [0238:29 MYT] KL ACC One four nine zero zero zero zero. 1838:31 UTC [0238:31 MYT] **HCM ACC** Yes and one zero nine east and one five zero zero at

time one eight three three.

Affirm.

1838:36 UTC [0238:36 MYT]

KL ACC

Malaysia Time [MYT] - UTC + 8 hours ICAO Airline Designator for Malaysia Airlines: MAS

TIME &

AIR-GROUND COMMUNICATION LUMPUR RADAR - FREQUENCY 132.6 MHz

AIR-GROUND COMMUNICATION
LUMPUR RADAR - FREQUENCY 132.6 MHz
AND RADAR DIRECT LINE COMMUNICATION
CONTENT - OTHER FLIGHTS

TIME & AND RADAR DIRECT LINE COMMUNICATION SOURCE CONTENT - MAS 370

TIME & SOURCE

1838:38 UTC [0238:38 MYT]

HCM ACC Alright okay thank you information we check position.

1838:40 UTC [0238:40 MYT]

KL ACC Okay right thank you.

Direct Line Telephone Conversation Between KL ACC and HCM ACC

1840:30 UTC [0240:30 MYT]

MAS 6163 Malaysian Six One Six Three request descend.

1840:36 UTC [0240:36 MYT]

Lumpur Radar Malaysian Six One Six Three descend flight level three

five zero.

1840:40 UTC [0240:40 MYT]

MAS 6163 When

163 When ready descend now to flight level three five zero

Malaysian Six One Six Three.

MH370 (9N	/I-MRO)		
TIME & SOURCE	AIR-GROUND COMMUNICATION LUMPUR RADAR - FREQUENCY 132.6 MHz AND RADAR DIRECT LINE COMMUNICATION CONTENT - MAS 370	TIME & SOURCE	AIR-GROUND COMMUNICATION LUMPUR RADAR - FREQUENCY 132.6 MHz AND RADAR DIRECT LINE COMMUNICATION CONTENT - OTHER FLIGHTS
		1843:01 UTC	
		[0243:01 MYT]	
		MAS 6163	Malaysian naa Six One Six Three leaving three six zero for flight level three five zero.
		1843:09 UTC	
		[0243:09 MYT]	
		Lumpur Radar	Malaysian Six One Six Three.
		1844:19 UTC	
		[0244:19 MYT]	
		Lumpur Radar	Malaysian Six One Six Three descend to flight level one six zero.
		1844:25 UTC	
		[0244:25 MYT]	
		MAS 6163	K Continue descend now to flight level one six zero Malaysian Six One Six Three.
		1844:30 UTC	
		[0244:30 MYT]	
		OCA 404	Air Asian Four Zero Four contact Bangkok one two three decimal niner five.
		1844:34 UTC	
		[0244:34 MYT]	
		OCA 404	One two three nine five Four Zero Four.

TIME &

AIR-GROUND COMMUNICATION LUMPUR RADAR - FREQUENCY 132.6 MHz AND RADAR DIRECT LINE COMMUNICATION

AIR-GROUND COMMUNICATION
LUMPUR RADAR - FREQUENCY 132.6 MHz
AND RADAR DIRECT LINE COMMUNICATION
CONTENT - OTHER FLIGHTS

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TIME &

AIR-GROUND COMMUNICATION LUMPUR RADAR - FREQUENCY 132.6 MHz AND RADAR DIRECT LINE COMMUNICATION CONTENT - MAS 370

TIME & SOURCE	AND RADAR DIRECT LINE COMMUNICATION CONTENT - MAS 370	TIME & SOURCE	AND RADAR DIRECT LINE COMMUNICATION CONTENT - OTHER FLIGHTS
		1849:53 UTC [0249:53 MYT] GIA 894	Squawk seven one one four Indonesia Eight Niner Four.
		1849:57 UTC [0249:57 MYT]	
		Lumpur Radar	Roger Indonesia Eight Niner Four wrong frequency sir and this is Kuala Lumpur.
		1850:04 UTC [0250:04 MYT] GIA 894	Okay Indonesia Eight Niner Four thank you.
		1852:46 UTC [0252:46 MYT]	Chay machodia Light Milet Four thank you.
		MAS 6163	Approaching flight level one six zero.
		1852:49 UTC [0252:49 MYT] Lumpur Radar	Malaysian Six One Six Three contact Butterworth one
			two five decimal eight.
		1852:53 UTC [0252:53 MYT] MAS 6163	Five eight Malaysian Six One Six Three.
			o.g malayolan olx ollo olx illioo.

frequency.

AIR-GROUND COMMUNICATION LUMPUR RADAR - FREQUENCY 132.6 MHz

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TIME &	AND RADAR DIRECT LINE COMMUNICATION	TIME &
SOURCE	CONTENT - MAS 370	SOURCE

SOURCE	CONTENT - MAS 370	SOURCE
1853:48 UTC [0253:48 MYT] MAS 386	Malayisan Three Seven Zero this is Malaysian The Eight Six.	nree
1854:02 UTC [0254:02 MYT] MAS 386	Malayisan Three Seven Zero this is Malaysian The Eight Six.	nree
1854:14 UTC [0254:14 MYT] Lumpur Radar	Malaysian Three Eight Six eer this is Lumpur F confirm you are trying to call Malaysian Three Se Zero.	
1854:21 UTC [0254:21 MYT] MAS 386	That is affirm sir eer because Ho Chi Minh asked contact them they have lost contact eer with the	
1854:28 UTC [0254:28 MYT] Lumpur Radar	Yeah okay affirm already transfer to Ho Chi Minh Ho Chi Minh negative contact with the aircraft ee try to raise the aircraft on maybe on emergency	

AIR-GROUND COMMUNICATION LUMPUR RADAR - FREQUENCY 132.6 MHz

AIR-GROUND COMMUNICATION
LUMPUR RADAR - FREQUENCY 132.6 MHz
AND RADAR DIRECT LINE COMMUNICATION
CONTENT - OTHER FLIGHTS

TIME & AND RADAR DIRECT LINE COMMUNICATION
SOURCE CONTENT - MAS 370

TIME & SOURCE

1854:39 UTC [0254:39 MYT] MAS 386

Roger we try one two one five eer... now we try on one

two three four five, thank you.

1854:52 UTC [0254:52 MYT]

Lumpur Radar Malaysian Three Eight Six Lumpur.

1904:24 UTC

[0304:24 MYT]

SLK 937 Lumpur Control very good morning Silk Air Nine Three

Seven flight level three nine zero approaching Victor

Kilo Bravo squawk one five one three.

1904:38 UTC

[0304:38 MYT]

Lumpur Radar Silk Air Niner Three Seven Lumpur Radar identified

maintain level three nine zero.

1904:44 UTC

[0304:44 MYT]

SLK 937 Silk air Nine Three Seven roger.

1909:36 UTC

[0309:36 MYT]

CEB 502 Lumpur Radar good morning Cebu Five Zero Two squawk

two one four three climbing level one eight zero.

AIR-GROUND COMMUNICATION LUMPUR RADAR - FREQUENCY 132.6 MHz AND RADAR DIRECT LINE COMMUNICATION

AIR-GROUND COMMUNICATION LUMPUR RADAR - FREQUENCY 132.6 MHz AND RADAR DIRECT LINE COMMUNICATION

TIME & SOURCE	AND RADAR DIRECT LINE COMMUNICATION CONTENT - MAS 370	TIME & SOURCE	AND RADAR DIRECT LINE COMMUNICATION CONTENT - OTHER FLIGHTS
		1909:45 UTC [0309:45 MYT] Lumpur Radar	Cebu Five Zero Two good morning climb level two niner zero direct Victor Papa Kilo.
		1909:53 UTC [0309:53 MYT] CEB 502	Climb level two niner zero and daasay again the direct waypoint sir.
		1909:59 UTC [0309:59 MYT] Lumpur Radar	Cebu Five Zero Two direct Victor Papa Kilo.
		1910:02 UTC [0310:02 MYT] CEB 502	Track direct Victor Papa Kilo aah Five Zero Two.
		1912:40 UTC [0312:40 MYT] GEC 530	Lumpur eer good evening German Cargo Five Three Zero flight level three five zero.
		1912:56 UTC [0312:56 MYT] GEC 530	Lumpur good evening German Cargo Five Three Zero.

TIME &

SOURCE

AIR-GROUND COMMUNICATION LUMPUR RADAR - FREQUENCY 132.6 MHz AND RADAR DIRECT LINE COMMUNICATION CONTENT - MAS 370

AIR-GROUND COMMUNICATION
LUMPUR RADAR - FREQUENCY 132.6 MHz
AND RADAR DIRECT LINE COMMUNICATION
CONTENT - OTHER FLIGHTS

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		1913:04 UTC [0313:04 MYT] Lumpur Radar	Station calling standby.
		1913:16 UTC [0313:16 MYT] Lumpur Radar	German Cargo Five Zero Two confirm squawk and level.
		1913:20 UTC [0313:20 MYT] GEC 530	Squawking six one one seven and level, level at three five zero approaching ah ah Victor Kilo Barvo German Cargo Five Three Zero.
		1913:28 UTC [0313:28 MYT] Lumpur Radar	German Cargo Three Five Zero identified maintain level three five zero.
		[1913:32 UTC] [0313:32 MYT] GEC 530	Maintain level three five zero German Cargo Three Five Zero.
		1917:33 UTC [0317:33 MYT] CES 540	Lumpur Radar good morning China Eastern Five Four Zero climb level one eight zero.

TIME &

SOURCE

AIR-GROUND COMMUNICATION

AIR-GROUND COMMUNICATION LUMPUR RADAR - FREQUENCY 132.6 MHz AND RADAR DIRECT LINE COMMUNICATION **CONTENT - OTHER FLIGHTS**

	LUMPUR RADAR - FREQUENCY 132.6 MHz
TIME &	AND RADAR DIRECT LINE COMMUNICATION
SOURCE	CONTENT - MAS 370

1917:51 UTC 0317:51 MYT CES 540	Lumpur Radar morning China Eastern Five Four Zero.
1918:00 UTC [0318:00 MYT] CES 540	Lumpur Approach Five Four Zero.
1918:07 UTC [0318:07 MYT] Lumpur Radar	(xxxx) [illegible] Five four Zero stanby.
1918:09 UTC [0318:09 MYT] Source unknown	(xxxx) [illegible]
1918:13 UTC [0318:13 MYT] Lumpur Radar	(xxxx) [illegible] Five Four Zero eer climb to two five
1918:18 UTC [0318:18 MYT] CES 540	zero. Confirm level two five zero China Air Five Four Zero.
1918:22 UTC [0318:22 MYT] Lumpur Radar	Affirm direct Victor Papa Kilo.

TIME &

SOURCE

Malaysia Time [MYT] - UTC + 8 hours

ICAO Airline Designator for Malaysia Airlines: MAS

SAFETY INVESTIGATION REPORT MH370 (9M-MRO)

AIR-GROUND COMMUNICATION LUMBUR DADAR ERECUENCY 422 6 MU-

AIR-GROUND COMMUNICATION LUMBUR DADAR EDECUENCY 422 6 MU-

TIME & SOURCE	LUMPUR RADAR - FREQUENCY 132.6 MHz AND RADAR DIRECT LINE COMMUNICATION CONTENT - MAS 370	TIME & SOURCE	LUMPUR RADAR - FREQUENCY 132.6 MHz AND RADAR DIRECT LINE COMMUNICATION CONTENT - OTHER FLIGHTS
		1918:25 UTC [0318:25 MYT] CES 540	Two five zero thank you.
		1920:06 UTC [0320:06 MYT] Lumpur Radar	China Eastern Five Four Zero climb flight level two niner zero.
		1920:10 UTC [0320:10 MYT] CES 540	Level two niner zero China Five Four Zero.
		1920:13 UTC [0320:13 MYT] Lumpur Radar	Cebu Five Zero Three contact Singpore one two three decimal seven.
		1920:18 UTC [0320:18 MYT] CEB 503	One two three decimal seven good day.
		1922:17 UTC [0322:17 MYT] CES 540	Lumpur Radar China Eastern Five Four Zero.
		1922:20 UTC [0322:20 MYT] Lumpur Radar	China Eastern Five Four Zero.

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AIR-GROUND COMMUNICATION LUMPUR RADAR - FREQUENCY 132.6 MHz AND RADAR DIRECT LINE COMMUNICATION

TIME & SOURCE	AND RADAR DIRECT LINE COMMUNICATION CONTENT - MAS 370	TIME & SOURCE	AND RADAR DIRECT LINE COMMUNICATION CONTENT - OTHER FLIGHTS
		1922:23 UTC [0322:23 MYT] CES 540	China Eastern request direct to Victor Papa Kilo.
		1922:28 UTC	Offinia Eastern request allost to Violer r apartite.
		[0322:28 MYT] Lumpur Radar	China Eastern Five Four Zero direct Victor Papa Kilo approved.
		1922:32 UTC [0322:32 MYT]	
		Lumpur Radar	Approved China Eastern Five Four Zero.
		1930:55 UTC [0330:55 MYT]	
		Lumpur Radar	China Eastern Five Four Zero contact Singapore one two three decimal seven.
		1931:00 UTC [0331:00 MYT] CES 540	Comfirm (xxxx) [illegible] China Five Four Zero.
		1931:03 UTC	
		[0331:03 MYT] Lumpur Radar	China Eastern Five Four Zero affirm one two three seven good day.

AIR-GROUND COMMUNICATION LUMPUR RADAR - FREQUENCY 132.6 MHz AND RADAR DIRECT LINE COMMUNICATION CONTENT. MAS 270

TIME & SOURCE	AND RADAR DIRECT LINE COMMUNICATION CONTENT - MAS 370	TIME & SOURCE	AND RADAR DIRECT LINE COMMUNICATION CONTENT - OTHER FLIGHTS
		1931:06 UTC [0331:06 MYT] CES 540	One two three seven China Eastern Five Four Zero.
		1932:40 UTC [0332:40 MYT] Lumpur Radar	Silk Air Nine Three Seven contact Singapore one two three decimal seven.
		1932:50 UTC [0332:50 MYT] Lumpur Radar	Silk Air Nine Three Seven contact Singapore one two three seven.
		1932:54 UTC [0332:54 MYT] SLK 937	Three seven Silk Air Nine Three Seven bye bye.
		1932:56 UTC [0332:56 MYT] Lumpur Radar	Bye bye.
		1933:52 UTC [0333:52 MYT] AXA 377	Lumpur Control good morning Xanadu Three Seven Seven flight level three six zero squawk two six three six.

AIR-GROUND COMMUNICATION
LUMPUR RADAR - FREQUENCY 132.6 MHz
AND RADAR DIRECT LINE COMMUNICATION
CONTENT - MAS 370

TIME & SOURCE	AND RADAR DIRECT LINE COMMUNICATION CONTENT - MAS 370	TIME & SOURCE	AND RADAR DIRECT LINE COMMUNICATION CONTENT - OTHER FLIGHTS
		1933:59 UTC [0333:59 MYT] Lumpur Radar	Xanadu Three Seven Seven identified direct Nipah for
			Nipah Three Alpha Arrival Three Two Right and naa for Istan Transition level three six zero.
		1934:12 UTC [0334:12 MYT]	
		AXA 377	Clear to Lumpur aah for Istan Transition Nipah Three Two Right and aah maintain flight level three six zero, request descend.
		1934:20 UTC [0334:20 MYT]	
		Lumpur Radar	Xanadu Three Seven Seven aah Traffic crossing on your eer on your right standby,
		1934:25 UTC [0334:25 MYT]	
		AXA 377	Roger copied,
		1936:24 UTC [0336:24 MYT]	
		GEC 530	German Cargo Five Three Zero request desend,
		1936:30 UTC [0336:30 MYT]	
		Lumpur Radar	German Cargo Five Three Zero standby,
			Malauria Tiras (NN/T), LITO a Chause

TIME &

SOURCE

AIR-GROUND COMMUNICATION
LUMPUR RADAR - FREQUENCY 132.6 MHz
AND RADAR DIRECT LINE COMMUNICATION
CONTENT - MAS 370

AIR-GROUND COMMUNICATION
LUMPUR RADAR - FREQUENCY 132.6 MHz
AND RADAR DIRECT LINE COMMUNICATION
CONTENT - OTHER FLIGHTS

Lumpur Sector 3+5 calling Singapore on Direct Line 1936:40 UTC [0336:40 MYT] Singapore ACC Lumpur Singapore. 1936:41 UTC [0336:41 MYT] KL ACC Aah German Cargo Five Three Zero can desend now. 1936:44 UTC [0336:44 MYT] Singapore ACC Can naa descend to flight level two niner zero. 1936:46 UTC [0336:46 MYT] KL ACC Two nine zero thank you. **END OF DIRECT LINE COMMUNICATION** 1936:50 UTC [0336:50 MYT] Lumpur Radar Cargo Five Three Zero descend to flight level two niner zero. 1936:55 UTC

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[0336:55 MYT] GEC 530

Three Zero.

TIME &

SOURCE

Malaysia Time [MYT] - UTC + 8 hours ICAO Airline Designator for Malaysia Airlines: MAS

Descend to flight level two nine zero German Cargo Five

TIME & SOURCE	AND RADAR DIRECT LINE COMMUNICATION CONTENT - MAS 370	TIME & SOURCE	AND RADAR DIRECT LINE COMMUNICATION CONTENT - OTHER FLIGHTS
		1936:59 UTC	
		[0336:59 MYT]	A (C)
		Lumpur Radar	Affirm.
		1937:32 UTC	
		[0337:32 MYT]	
		Lumpur Radar	Xanadu Three Seven Seven desend to flight level one niner zero.
		1937:37 UTC	
		[0337:37 MYT] AXA 377	Flight level one niner zero Xanadu Three Seven Seven.
		1938:03 UTC	
		[0338:03 MYT]	
		Lumpur Radar	German Cargo Five Three Zero contact Singapore now one two three seven.
		1938:08 UTC	
		[0338:08 MYT]	
		GEC 530	Three seven German Cargo Five Three Zero good night.
		1938:12 UTC	
		[0338:12 MYT]	
		Lumpur Radar	Good night.
		1942:13 UTC	
		[0342:13 MYT]	
		Lumpur Radar	Three Seven Seven descend to flight level one five zero.
		Page 54 of 125	Malaysia Time [MYT] - UTC + 8 hours ICAO Airline Designator for Malaysia Airlines: MAS

AIR-GROUND COMMUNICATION LUMPUR RADAR - FREQUENCY 132.6 MHz AND RADAR DIRECT LINE COMMUNICATION CONTENT - MAS 370

TIME & SOURCE	AND RADAR DIRECT LINE COMMUNICATION CONTENT - MAS 370	TIME & SOURCE	AND RADAR DIRECT LINE COMMUNICATION CONTENT - OTHER FLIGHTS
		1942:16 UTC [0342:16 MYT] AXA 377	Confirm desend to flight level one five zero for Xanadu Three Seven Seven.
		1942:20 UTC [0342:20 MYT] Lumpur Radar	Xanadu Three Seven Seven affirm descend one five zero.
		1942:24 UTC [0342:24 MYT] AXA 377	Roger descend to flight level one five zero Xanadu Three Seven Seven.
		1942:50 UTC [0342:50 MYT] SLK 509	Lumpur Control Silk Air Five Zero Niner good morning.
		1942:54 UTC [0342:54 MYT] Lumpur Radar	Silk Air Five Zero Nine morning confirm squawk.
		1942:58 UTC [0342:58 MYT] SLK 509	Squawk seven four zero two flight level three nine zero Victor Kilo Bravo.

AIR-GROUND COMMUNICATION LUMPUR RADAR - FREQUENCY 132.6 MHz AND RADAR DIRECT LINE COMMUNICATION CONTENT - MAS 370

TIME & SOURCE	AND RADAR DIRECT LINE COMMUNICATION CONTENT - MAS 370	TIME & SOURCE	AND RADAR DIRECT LINE COMMUNICATION CONTENT - OTHER FLIGHTS
		1943:04 UTC	
		[0343:04 MYT]	
		Lumpur Radar	Five Zero Nine identified maintain three nine zero.
		1943:07 UTC	
		[0343:07 MYT]	
		SLK 509	Flight level three nine zero Silk Air Five Zero Nine.
		1945:18 UTC	
		[0345:18 MYT]	
		AXA 377	Xanadu Three Seven Seven request lower.
		1945:24 UTC	
		[0345:24 MYT]	
		Lumpur Radar	Xanadu Three Seven Seven contact Approach one two one two five.
		1945:28 UTC	
		[0345:28 MYT]	
		AXA 377	One two one two five Xanadu Three Seven Seven.
		1945:52 UTC	
		[0345:52 MYT]	
		TAX 5094	Good morning Jonathan Five Zero Nine Four passing flight level two six seven for flight level two eight zero squawk two two one zero.

TIME & SOURCE	AIR-GROUND COMMUNICATION LUMPUR RADAR - FREQUENCY 132.6 MHz AND RADAR DIRECT LINE COMMUNICATION TIME & CONTENT - MAS 370 SOURCE		AIR-GROUND COMMUNICATION LUMPUR RADAR - FREQUENCY 132.6 MHz AND RADAR DIRECT LINE COMMUNICATION CONTENT - OTHER FLIGHTS	
		1946:06 UTC [0346:06 MYT] Lumpur Radar	Five Zero Nine Four Five Zero Nine climb to flight level three four zero.	
		1946:14 UTC [0346:14 MYT] TAX 5094	Climb to flight level three four zero Jonathan Five Zero Nine Four.	

Radar direct line ringing

Background talking by Sector 3+5 Radar Controller

1948:46 UTC

[0348:46 MYT]

KL ACC One seven one seven (bukan aku punya) [National

Language]

1948:52 UTC

[0348:52 MYT]

HCM ACC Kuala Lumpur Ho Chi Minh.

1948:53 UTC

[0348:53 MYT]

KL ACC Ho Chi Minh regarding the Malaysian Three Seven Zero

earlier any any any news from the aircraft.

AIR-GROUND COMMUNICATION LUMPUR RADAR - FREQUENCY 132.6 MHz

AIR-GROUND COMMUNICATION
LUMPUR RADAR - FREQUENCY 132.6 MHz
AND RADAR DIRECT LINE COMMUNICATION
CONTENT - OTHER FLIGHTS

TIME &	AND RADAR DIRECT LINE COMMUNICATION
SOURCE	CONTENT - MAS 370

1949:02 UTC [0349:02 MYT] HCM ACC	Until now nothing.
1949:04 UTC [0349:04 MYT] KL ACC	Nothing aa so far because aircaft suppose to pass IGARI at time two two IGARI two two so far you negative contact at all with the aircraft.
1949:15 UTC [0349:15 MYT] HCM ACC	Standby.
1949:16 UTC [0349:16 MYT] KL ACC	You check with adjacent FIR.
1949:20 UTC [0349:20 MYT] HCM ACC	Sorry.
1949:21 UTC [0349:21 MYT] KL ACC	Aah Halo.
1949:22 UTC [0349:22 MYT] HCM ACC	Yeah.

TIME &

SOURCE

[0349:34 MYT] **HCM ACC**

1949:37 UTC [0349:37 MYT]

KL ACC

AIR-GROUND COMMUNICATION LUMPUR RADAR - FREQUENCY 132.6 MHz

AIR-GROUND COMMUNICATION LUMPUR RADAR - FREQUENCY 132.6 MHz AND RADAR DIRECT LINE COMMUNICATION **CONTENT - OTHER FLIGHTS**

TIME & AND RADAR DIRECT LINE COMMUNICATION

TIME &

SOURCE	CONTENT - MAS 370	SOURCE
1949:23 UTC [0349:23 MYT] KL ACC	Yeah regarding the Malaysian Three Seven Zero	earlier.
1949:26 UTC [0349:26 MYT] HCM ACC	Yeah.	
1949:27 UTC [0349:27 MYT] KL ACC	Yeah is there any news (dia punya dia punya) [Na Language] aircraft.	itional
1949:32 UTC [0349:32 MYT] HCM ACC	Sorry news.	
1949:33 UTC [0349:33 MYT] KL ACC	News you have anything about the aircraft.	
1949:34 UTC		

Yeah we don't have any information until now.

two two aah.

Ya informtion that aircraft supposed to pass IGARI time

Malaysia Time [MYT] - UTC + 8 hours ICAO Airline Designator for Malaysia Airlines: MAS

AIR-GROUND COMMUNICATION LUMPUR RADAR - FREQUENCY 132.6 MHz

AIR-GROUND COMMUNICATION
LUMPUR RADAR - FREQUENCY 132.6 MHz
AND RADAR DIRECT LINE COMMUNICATION
CONTENT - OTHER FLIGHTS

TIME & AND RADAR DIRECT LINE COMMUNICATION SOURCE CONTENT - MAS 370

SOURCE	CONTENT - MAS 370 SOURCE	:
1949:42 UTC [0349:42 MYT] HCM ACC	Sorry.	
1949:43 UTC [0349:43 MYT] KL ACC	Suppose to pass IGARI one seven two two estimate IGARI one seven two two earlier.	
1949:49 UTC [0349:49 MYT] HCM ACC	Yeah.	
1949:50 UTC [0349:50 MYT] KL ACC	Can you check with the adjacent FIR is the aircraft is going to Beijing.	
1949:55 UTC [0349:55 MYT] HCM ACC	Ah ahOh yes I, I after position naa we have no information and no contact the aircraft at position naaa IGARI and then about few minutes later the aircraft disappear our radar.	
1950:08 UTC [0350:08 MYT] KL ACC	There there is the aircraft whether whether contact with you aa I mean aaa.	

TIME &

AIR-GROUND COMMUNICATION LUMPUR RADAR - FREQUENCY 132.6 MHz

AIR-GROUND COMMUNICATION
LUMPUR RADAR - FREQUENCY 132.6 MHz
AND RADAR DIRECT LINE COMMUNICATION
CONTENT - OTHER FLIGHTS

	LUMPUR RADAR - FREQUENCY 132.0 MITZ
TIME &	AND RADAR DIRECT LINE COMMUNICATION
SOURCE	CONTENT - MAS 370

1950:16 UTC [0350:16 MYT] **HCM ACC** We just see him on the radar screen one time and after a few minutes later disappear. 1950:21 UTC [0350:21 MYT] KL ACC After ah... after ah a few minutes later disappear. 1950:26 UTC [0350:26 MYT] **HCM ACC** Yeah. 1950:27 UTC [0350:27 MYT] KL ACC Okay then so far you have no news about the aircraft. 1950:31 UTC [0350:31 MYT] **HCM ACC** Yeah until now we ask many aircraft company or the aircraft on frequency but no response no one ah... know about Malaysian Three Seven Zero until now. 1950:42 UTC [0350:42 MYT] KL ACC No one know okay actually by the routing aa after IGARI how is tracking to which FIR which FIR he will be going.

TIME &

SOURCE

AIR-GROUND COMMUNICATION LUMPUR RADAR - FREQUENCY 132.6 MHz

AIR-GROUND COMMUNICATION
LUMPUR RADAR - FREQUENCY 132.6 MHz
AND RADAR DIRECT LINE COMMUNICATION
CONTENT - OTHER FLIGHTS

TIME & AND RADAR DIRECT LINE COMMUNICATION SOURCE CONTENT - MAS 370

TIME & SOURCE

1950:51 UTC [0350:51 MYT]

HCM ACC Yeah Sanya.

1950:53 UTC [0350:53 MYT]

KL ACC Ah... aah...

1950:54 UTC [0350:54 MYT]

HCM ACC Yeah, Chinese Sanya Chinese.

1950:56 UTC [0350:56 MYT]

KL ACC Sanya Chinese can you check with them whether they

are is there,

1950:59 UTC [0350:59 MYT]

HCM ACC I asked already, I already untill now no response from

him.

1951:02 UTC [0351:02 MYT]

KL ACC Okay no response okay in that case if anything you got

any news on this thing because operations is asking if you got any news you give me or you just inform Lumpur.

AIR-GROUND COMMUNICATION LUMPUR RADAR - FREQUENCY 132.6 MHz

SOURCE	CONTENT - MAS 370	SOURCE
TIME &	AND RADAR DIRECT LINE COMMUNICATION	TIME &
	Zomi on maximum integration for mine	

1951:12 UTC [035112 MYT] HCM ACC	Yeah sure.
1951:13 UTC [0351:13 MYT] KL ACC	And so so so the the the you have taken immediate action about the aircraft, you taken any action about the aircraft,
1951:22 UTC [035122 MYT] HCM ACC	Taking,
1951:23 UTC [0351:23 MYT] KL ACC	Action action what what action are you taking with regarding the aircraft,,
1951:27 UTC [035127 MYT] HCM ACC	Aah currently we are try to coordination with Sanya about the information because the time transfer, flight level,
1951:36 UTC [0351:36 MYT] KL ACC	Aaah

AIR-GROUND COMMUNICATION LUMPUR RADAR - FREQUENCY 132.6 MHz

AIR-GROUND COMMUNICATION
LUMPUR RADAR - FREQUENCY 132.6 MHz
AND RADAR DIRECT LINE COMMUNICATION
CONTENT - OTHER FLIGHTS

TIME & AND RADAR DIRECT LINE COMMUNICATION
SOURCE CONTENT - MAS 370

TIME & SOURCE

1951:37 UTC [0351:37 MYT]

HCM ACC And we have information to the Sunny nothing.

1951:41 UTC

[0351:41 MYT]

KL ACC Okay okay if there is anything you advise Lumpur

please aah...

1951:44 UTC

[0351:44 MYT]

HCM ACC Yeah.

1951:45 UTC [0351:45 MYT]

KL ACC Okay okay we will keep in touch thank you.

End Of Direct Line Telephone Conversation Between KL ACC (Sector 3+5) with HCM ACC

Direct Line Telephone Conversation
Between KL ACC (Sector 3+5) And MAS Operations

1956:13 UTC [0356:13 MYT]

KL ACC Dailing Direct Telephone Line.

AIR-GROUND COMMUNICATION LUMPUR RADAR - FREQUENCY 132.6 MHz

AIR-GROUND COMMUNICATION
LUMPUR RADAR - FREQUENCY 132.6 MHz
AND RADAR DIRECT LINE COMMUNICATION
CONTENT - OTHER FLIGHTS

LUMPUR RADAR - FREQUENCY 132.6 MHz
AND RADAR DIRECT LINE COMMUNICATION
CONTENT - MAS 370

TIME & SOURCE

1956:19 UTC [0356:19 MYT]

TIME &

SOURCE

KL ACC (Satu dua Enam Empat) [National Language]

1956:22 UTC

[0356:22 MYT] Direct Telephone ringing

1956:27 UTC [0356:27 MYT]

MAS Operations Hello selamat pagi[National Language]

1956:29 UTC [0356:29 MYT]

KL ACC Pagi [National Language] Operation Centre here.

1956:31 UTC [0356:31 MYT]

MAS Operations Centre yeah Centre.

1956:32 UTC [0356:32 MYT]

KL ACC Is there anything on any news on Mal Malaysian Three

Seven Zero.

1956:35 UTC [0356:35 MYT]

MAS Operations Not yet laa sir.

AIR-GROUND COMMUNICATION LUMPUR RADAR - FREQUENCY 132.6 MHz

AIR-GROUND COMMUNICATION
LUMPUR RADAR - FREQUENCY 132.6 MHz
AND RADAR DIRECT LINE COMMUNICATION
CONTENT - OTHER FLIGHTS

LUMPUR RADAR - FREQUENCY 132.6 MHz
AND RADAR DIRECT LINE COMMUNICATION
CONTENT - MAS 370

TIME & SOURCE

1956:36 UTC [0356:36 MYT]

TIME &

SOURCE

KL ACC Not yet.

1956:37 UTC [0356:37 MYT]

MAS Operations Aah... takdak lagi [National Language]

1956:38 UTC [0356:38 MYT]

KL ACC Masa I check with Ho Chi Minh we we can check with

Ho Chi Minh laa.. Ho Chi Minh kata takdak dia pun tak contact tapi at one time dia kata nampak blip tau.

[National Language]

1956:45 UTC [0356:45 MYT]

MAS Operations Nampak bling. [National Language]

1956:46 UTC [0356:46 MYT]

KL ACC Aah... dia nampak blip aaa... IGARI side la kan.

[National Language]

1956:50 UTC [0356:50 MYT]

MAS Operations IGARI side lah.

AIR-GROUND COMMUNICATION LUMPUR RADAR - FREQUENCY 132.6 MHz

AIR-GROUND COMMUNICATION
LUMPUR RADAR - FREQUENCY 132.6 MHz
AND RADAR DIRECT LINE COMMUNICATION
CONTENT - OTHER FLIGHTS

TIME & SOURCE

AND RADAR DIRECT LINE COMMUNICATION TIME & CONTENT - MAS 370 SOURCE

1956:51 UTC [0356:51 MYT]

KL ACC

Aah dia kata last last itu nampak blip tetapi [National

Language]

1956:53 UTC [0356:53 MYT]

MAS Operations Pukul berapa itu. [National Language]

1956:55 UTC [0356:55 MYT]

KL ACC Aaa...eeh...estimate IGARI tadi lebih kurang pukul pukul

satu dua puluh lima laa lebih kurang tu lah. [National

Language]

1957:01 UTC [0357:01 MYT]

MAS Operations Okay.

1956:02 UTC [0356:02 MYT]

KL ACC Eh lepas tu dia kata nampak blip lepas tu takdak.

[National Language]

1957:06 UTC [0357:06 MYT]

MAS Operations Dalam monitor dia orang masih ada lagi tak.

[National Language]

AIR-GROUND COMMUNICATION LUMPUR RADAR - FREQUENCY 132.6 MH

AIR-GROUND COMMUNICATION
LUMPUR RADAR - FREQUENCY 132.6 MHz
AND RADAR DIRECT LINE COMMUNICATION
CONTENT - OTHER FLIGHTS

LUMPUR RADAR - FREQUENCY 132.6 MHz
AND RADAR DIRECT LINE COMMUNICATION
CONTENT - MAS 370

1956:08 UTC [0356:08 MYT]

TIME &

SOURCE

KL ACC Takdak tadak dia nampak sekejap dalam monitor dia

orang cakap nampak sekejap macam tu lah lebih pada tu takdak contact, no contact. [National Language]

1957:16 UTC [0357:16 MYT]

MAS Operations Alamak. [National Language]

1957:16 UTC [0357:16 MYT]

KL ACC Aah... itulah so saya suruh dia check dia check

adjacent FIR aah so far takdak lagi no news dia kata.

[National Language]

1957:24 UTC [0357:24 MYT]

MAS Operations No news so kita orang pun try juga [National Language]

I... aircraft.

1957:28 UTC [0357:28 MYT]

KL ACC Aah.

1957:28 UTC [0357:28 MYT]

MAS Operations Belum ada response lagi. [National Language]

TIME &

SOURCE

AIR-GROUND COMMUNICATION LUMPUR RADAR - FREQUENCY 132.6 MHz

AIR-GROUND COMMUNICATION
LUMPUR RADAR - FREQUENCY 132.6 MHz
AND RADAR DIRECT LINE COMMUNICATION
CONTENT - OTHER FLIGHTS

TIME & SOURCE

AND RADAR DIRECT LINE COMMUNICATION
CONTENT - MAS 370

TIME & SOURCE

1957:30 UTC [0357:30 MYT]

KL ACC Okaylah anything you you just inform us lah aah.

1957:32 UTC [0357:32 MYT]

MAS Operations Aah okay okay.

1957:33 UTC [0357:33 MYT]

KL ACC Kita dapat apa apa we inform you lah. [National Language]

1957:35 UTC [0357:35 MYT]

MAS Operations Okay okay.

1957:36 UTC [0357:36 MYT]

KL ACC Eer okay okay right.

1957:37 UTC [0357:37 MYT]

MAS Operations Siapa cakap ni [National Language]

1957:37 UTC [0357:37 MYT]

KL ACC Aaa... saya xxxxx sini [National Language]

AIR-GROUND COMMUNICATION LUMPUR RADAR - FREQUENCY 132.6 MHz

AIR-GROUND COMMUNICATION
LUMPUR RADAR - FREQUENCY 132.6 MHz
AND RADAR DIRECT LINE COMMUNICATION
CONTENT - OTHER FLIGHTS

TIME & SOURCE

AND RADAR DIRECT LINE COMMUNICATION
CONTENT - MAS 370

TIME & SOURCE

1957:39 UTC [0357:39 MYT]

MAS Operations Okay okay.

1957:39 UTC

[0357:39 MYT]

KL ACC Okay right.

End of Direct Line Telephone Conversation
Between KL ACC and MAS Operations Centre

2003:11 UTC [0403:11 MYT]

Lumpur Radar Silk Air Five Zero Niner contact Singapore one two three

decimal seven.

2003:17 UTC

[0403:17 MYT]

SLK 509 You are coming in broken can you say again Silk Air

Five Zero Nine.

2003:20 UTC

[0403:20 MYT]

Lumpur Radar Singapore one two three decimal seven.

2003:23 UTC

[0403:23 MYT]

SLK 509 One two three decimal seven good day Silk Air Five Zero

Nine.

Malaysia Time [MYT] - UTC + 8 hours ICAO Airline Designator for Malaysia Airlines: MAS

AIR-GROUND COMMUNICATION LUMPUR RADAR - FREQUENCY 132.6 MHz AND RADAR DIRECT LINE COMMUNICATION

TIME & SOURCE	AND RADAR DIRECT LINE COMMUNICATION CONTENT - MAS 370	TIME & SOURCE	AND RADAR DIRECT LINE COMMUNICATION CONTENT - OTHER FLIGHTS
		2005:19 UTC [0405:19 MYT] Lumpur Radar	Silk Air Five Zero Nine contact Singapore one two three seven good day.
		2005:26 UTC [0405:26 MYT] Jonathan 5094	Confirm Jonathan Five Zero Nine Four.
		2005:30 UTC [0405:30 MYT] Lumpur Radar	Silk Air, Silk Air Five Zero Niner Singapore one two three seven.
		2006:46 UTC [0406:46 MYT] SIA 67	Lumpur Control Singapore Six Seven good morning passing Victor Kilo Bravo zero niner flight level three seven zero squawk one two one four.
		2006:56 UTC [0406:56 MYT] Lumpur Radar	Singapore Six Seven Lumpur Radar can confirm squawk one two one four.
		2007:01 UTC [0407:01 MYT] SIA 67	Affirm Singapore Six Seven.

TIME &

AIR-GROUND COMMUNICATION LUMPUR RADAR - FREQUENCY 132.6 MHz AND RADAR DIRECT LINE COMMUNICATION

AIR-GROUND COMMUNICATION
LUMPUR RADAR - FREQUENCY 132.6 MHz
AND RADAR DIRECT LINE COMMUNICATION
CONTENT - OTHER FLIGHTS

SOURCE	CONTENT - MAS 370	SOURCE	CONTENT - OTHER FLIGHTS
		2007:04 UTC [0407:04 MYT] Lumpur Radar	Singapore Six Seven identified.
		2007:07 UTC [0407:07 MYT] SIA 67	Singapore Six Seven.
		2009:22 UTC [0409:22 MYT] KAL 385	Lumpur Radar Korea Air Three Eight Five good morning maintain level three five zero.
		2009:31 UTC [0409:31 MYT] Lumpur Radar	Korean Air Three Eight Five identified direct to Nipah for Nipah Three Alpha Arrival Runway Three Two Right, descend when ready to flight level one five zero.
		2009:45 UTC [0409:45 MYT] KAL 385	Korean Air Three Eight Five confirm direct Nipah, Nipah Three Alpha and when ready one five zero, Three Two Right confirm.
		2009:55 UTC [0409:55 MYT] Lumpur Radar	Korean Air Three Eight Five that is affirm.

TIME &

AIR-GROUND COMMUNICATION LUMPUR RADAR - FREQUENCY 132.6 MHz AND RADAR DIRECT LINE COMMUNICATION

AIR-GROUND COMMUNICATION
LUMPUR RADAR - FREQUENCY 132.6 MHz
AND RADAR DIRECT LINE COMMUNICATION

TIME & SOURCE	AND RADAR DIRECT LINE COMMUNICATION CONTENT - MAS 370	TIME & SOURCE	AND RADAR DIRECT LINE COMMUNICATION CONTENT - OTHER FLIGHTS
		2009:57 UTC [0409:57 MYT] KAL 385	Thank you.
		2011:20 UTC [0411:20 MYT] KAL 385	Lumpur Radar Korean Air Three Eight five leaving three five zero for one five zero.
		2011:25 UTC [0411:25 MYT] Lumpur Radar	Roger Three Eight Five.
		2012:15 UTC [0412:15 MYT] TAX 5094	Jonathan Five Zero Nine Four maintain flight level three four zero, approaching Victor Kilo Bravo.
		2012:30 UTC [0412:30 MYT] TAX 5094	Jonathan Five Zero Nine Four Victor Kilo Bravo.
		2012:37 UTC [0412:37 MYT] Lumpur Radar	Five Zero Nine Four call Bangkok one two three niner five.
		2012:42 UTC [0412:42 MYT] TAX 5094	One two three niner five Jonathan Five Zero Nine Four.
		Page 73 of 125	Malaysia Time [MYT] - UTC + 8 hours ICAO Airline Designator for Malaysia Airlines: MAS

AIR-GROUND COMMUNICATION LUMPUR RADAR - FREQUENCY 132.6 MHz

TIME & **SOURCE** AND RADAR DIRECT LINE COMMUNICATION **CONTENT - MAS 370**

TIME & SOURCE

AIR-GROUND COMMUNICATION LUMPUR RADAR - FREQUENCY 132.6 MHz AND RADAR DIRECT LINE COMMUNICATION **CONTENT - OTHER FLIGHTS**

2015:17 UTC [0415:17 MYT] SIA 447	Lumpur Control selamat pagi Singapore Four Four Seven flight level three nine zero squawk four seven five one estimate Victor Kilo Bravo one six.
2015:30 UTC [0415:30 MYT] Lumpur Radar	Singapore Four Four Seven identified maintain flight level three nine zero.
2015:33 UTC [0415:33 MYT] SIA 447	Flight level three nine zero Singapore Four Four Seven.
2015:40 UTC [0415:40 MYT] Lumpur Radar	Korean Air Three Eight Five contact Approach one two one two five.
2015:45 UTC [0415:45 MYT] KAL 385	One two one two five Korean Air Three Eight Five good day.

TIME &

SOURCE

AIR-GROUND COMMUNICATION
LUMPUR RADAR - FREQUENCY 132.6 MHz
AND RADAR DIRECT LINE COMMUNICATION
CONTENT - MAS 370

AIR-GROUND COMMUNICATION LUMPUR RADAR - FREQUENCY 132.6 MHz AND RADAR DIRECT LINE COMMUNICATION CONTENT - OTHER FLIGHTS

2015:48 UTC [0415:48 MYT] Lumpur Radar	Good day.
	Noise caused by static from 2016:22 until 2020:48
2020:40 UTC [0420:40 MYT] Lumpur Radar	Singapore Six Seven Lumpur Control radio check how do you read.
2023:42 UTC [0423:42 MYT] MAS 381	Lumpur Control Malaysian naaThree Eight One aah good morning flight level three five zero squawk three one two seven.
2023:51 UTC [0423:51 MYT] Lumpur Radar	Good morning Three Eight One direct to Pibos for Nipah Three Alpha Arrival Pibos Transition Three Two Left descend level one five zero.
2023:58 UTC [0423:58 MYT] MAS 381	Direct Pibos eer Nipah Three Alpha Arrival Three Two Right confirm and ready desend to flight level one five zero.

TIME &

SOURCE

TIME & SOURCE	AIR-GROUND COMMUNICATION LUMPUR RADAR - FREQUENCY 132.6 MHz AND RADAR DIRECT LINE COMMUNICATION CONTENT - MAS 370	TIME & SOURCE	AIR-GROUND COMMUNICATION LUMPUR RADAR - FREQUENCY 132.6 MHz AND RADAR DIRECT LINE COMMUNICATION CONTENT - OTHER FLIGHTS
		2024:08 UTC [0424:08 MYT] Lumpur Radar	Affirm Runway Three Two Right.
		2024:10 UTC [0424:10 MYT]	

MAS 381

Direct Line Telephone Conversation Between KL ACC and HCM ACC

talk to your supervisor please. 2025:28 UTC [0425:28 MYT] KL ACC Okay anything anything. 2025:31 UTC [0425:31 MYT] HCM ACC I want to talk about Malaysian Three Seven Zero you	2025:22 UTC [0425:22 MYT] KL ACC	Lumpur.
[0425:28 MYT] KL ACC Okay anything anything. 2025:31 UTC [0425:31 MYT] HCM ACC I want to talk about Malaysian Three Seven Zero you	[0425:23 MYT]	Yeah this is Tango Alfa Supervisor in Ho Chi MInh let me talk to your supervisor please.
[0425:31 MYT] HCM ACC I want to talk about Malaysian Three Seven Zero you	[0425:28 MYT]	
have any information from company ividiaysian Aliffines	[0425:31 MYT]	I want to talk about Malaysian Three Seven Zero you have any information from company Malaysian Airlines.

Runway Three Two Right Malaysian Three Eight One.

AIR-GROUND COMMUNICATION LUMPUR RADAR - ERECUENCY 132 6 MHz

Negative, negative they are still checking also that's

AIR-GROUND COMMUNICATION **LUMPUR RADAR - FREQUENCY 132.6 MHz** AND RADAR DIRECT LINE COMMUNICATION **CONTENT - OTHER FLIGHTS**

	Edili OK KADAK TREGGEROT 102.0 Mile
TIME &	AND RADAR DIRECT LINE COMMUNICATION
SOURCE	CONTENT - MAS 370

why I am also checking with you.

TIME & SOURCE 2025:37 UTC

2025:43 UTC [0425:43 MYT]

[0425:37 MYT]

KL ACC

HCM ACC Negative infromation about our Malaysian Three Seven

Zero from Malaysian Airlines.

2025:48 UTC [0425:48 MYT]

KL ACC Affirm negative, negative information from the Operation

negative negative information.

2025:54 UTC [0425:54 MYT]

HCM ACC Ah okay I want to confirm the last position we have aa...

contact with the aircraft.

2026:01 UTC [0426:01 MYT]

KL ACC The last position we contact the last position we contact

that was about IGARI.

Lumpur controller communicating with aircraft

2026:04 UTC [0426:04 MYT]

MAS 381

(xxx) [illegible] direct NIPAH (xxx) [illegible] one five.

AIR-GROUND COMMUNICATION LUMPUR RADAR - FREQUENCY 132.6 MHz

AIR-GROUND COMMUNICATION
LUMPUR RADAR - FREQUENCY 132.6 MHz
AND RADAR DIRECT LINE COMMUNICATION
CONTENT - OTHER FLIGHTS

TIME & AND RADAR DIRECT LINE COMMUNICATION T
SOURCE CONTENT - MAS 370 S

TIME & SOURCE

2026:06 UTC

[0426:06 MYT] HCM ACC

IGARI.

2026:09 UTC

[0426:09 MYT]

Lumpur Radar Roger Three Eight One track direct to Nipah.

2026:10 UTC [0426:10 MYT]

HCM ACC Helo.

2026:11 UTC [0426:11 MYT]

KL ACC Helo yeah.

2026:12 UTC

[0426:12 MYT]

Lumpur Radar Malysian Three Eight One.

2026:13 UTC

[0426:13 MYT]

HCM ACC The the Malaysian Three Seven Zero aah still in

contact with you at IGARI.

AIR-GROUND COMMUNICATION LUMPUR RADAR - FREQUENCY 132.6 MHz

AIR-GROUND COMMUNICATION
LUMPUR RADAR - FREQUENCY 132.6 MHz
AND RADAR DIRECT LINE COMMUNICATION

CONTENT - OTHER FLIGHTS

TIME & AND RADAR DIRECT LINE COMMUNICATION SOURCE CONTENT - MAS 370

TIME & SOURCE

2026:19 UTC [0426:19 MYT] KL ACC

Aah... Time ah... Still flying aah fly over over airspace ... hold on aah hold on aah I still still aah the log book aah negative contact aah emm IGARI one seven two two aaa Ho Chi Minh has lost radar contact to aah one eight one zero hold on aah hold on the last the last position contact was aircraft was flying.

[Note: controller is reading the log book]

Aah I am not sure what what the last the last contact what was the time but the aircraft was I mean estimate IGARI estimate IGARI one seven two two if is there a possibility

the aircraft calling you.

2027:07 UTC [0427:07 MYT]

HCM ACC Neg negative negative.

2027:17 UTC

[0427:10 MYT] So what aah... you you observe on radar you observe on

KL ACC radar, what time was it last observed on radar.

2027:17 UTC

[0427:17 MYT] Aah... After IGARI aah... The position BITOD at BITOD

HCM ACC after disappear.

2027:25 UTC [0427:25 MYT]

KL ACC Ooh ... you you you for how how long you you

Helo.

HCM ACC

TIME & SOURCE	AIR-GROUND COMMUNICATION LUMPUR RADAR - FREQUENCY 132.6 MHz AND RADAR DIRECT LINE COMMUNICATION CONTENT - MAS 370	TIME & SOURCE
		2027:27 UTC [0427:27 MYT] MAS 381
2027:29 UTC [0427:29 MYT] KL ACC	Hold hold on aah	
		2027:31 UTC [0427:31 MYT] Lumpur Radar
2027:32 UTC [0427:32 MYT] KL ACC	So you observe aah at position BITOD, so for ho you observe the aircraft at what level.	w long
2027:42 UTC [0427:42 MYT] HCM ACC	Standby.	
2027:42 UTC [0427:42 MYT] KL ACC	You have any idea on it.	
2027:50 UTC [0427:50 MYT]		

AIR-GROUND COMMUNICATION LUMPUR RADAR - FREQUENCY 132.6 MHz AND RADAR DIRECT LINE COMMUNICATION CONTENT - OTHER FLIGHTS

Three Eight One leaving for one five confirm.

Three Eight One roger.

AIR-GROUND COMMUNICATION LUMPUR RADAR - FREQUENCY 132.6 MHz

AIR-GROUND COMMUNICATION
LUMPUR RADAR - FREQUENCY 132.6 MHz
AND RADAR DIRECT LINE COMMUNICATION
CONTENT - OTHER FLIGHTS

SOURCE	CONTENT - MAS 370
TIME &	AND RADAR DIRECT LINE COMMUNICATION
	LOWIN ON NADAN - I NEGOLINO I 102:0 WITE

2027:50 UTC [0427:50 MYT] KL ACC	Yes.
2027:52 UTC [0427:52 MYT] HCM ACC	Aah You said you asked about the flight level
2027:55 UTC [0427:55 MYT] KL ACC	Ah yes, when you you observe on the radar what what level of the aircraft.
2028:00 UTC [0428:00 MYT] HCM ACC	Three Five Zero.
2028:01 UTC [0428:01 MYT] KL ACC	Three five zero so after that once you observe the thing and then no contact at all after that.
2028:08 UTC [0428:08 MYT] HCM ACC	Yeah, no at IGARI we don't have the contact I just seen on the radar three five zero.

TIME &

SOURCE

AIR-GROUND COMMUNICATION LUMPUR RADAR - FREQUENCY 132.6 MHz

AIR-GROUND COMMUNICATION
LUMPUR RADAR - FREQUENCY 132.6 MHz
AND RADAR DIRECT LINE COMMUNICATION
CONTENT - OTHER FLIGHTS

TIME & AND RADAR DIRECT LINE COMMUNICATION SOURCE CONTENT - MAS 370

TIME & SOURCE

2028:14 UTC [0428:14 MYT] KL ACC

Ooh Three five zero.

2028:15 UTC [0428:15 MYT]

HCM ACC And after BITOD so we... disappear the aircraft.

2028:19 UTC [0428:19 MYT]

KL ACC The aircraft disappear from the screen so you you you

try to contact through relay by another aircraft.

2028:26 UTC [0428:26 MYT]

HCM ACC Yeah.... yeah sure all frequencies we have and all

aircraft but no reponse.

2028:31 UTC [0428:31 MYT]

KL ACC No response even on emergency frequency no

response also.

2028:34 UTC [0428:34 MYT]

HCM ACC Yea that's all.

AIR-GROUND COMMUNICATION LUMPUR RADAR - FREQUENCY 132.6 MHz

AIR-GROUND COMMUNICATION
LUMPUR RADAR - FREQUENCY 132.6 MHz
AND RADAR DIRECT LINE COMMUNICATION
CONTENT - OTHER FLIGHTS

TIME & AND RADAR DIRECT LINE COMMUNICATION SOURCE CONTENT - MAS 370

TIME & SOURCE

2028:36 UTC [0428:36 MYT]

KL ACC Yeah because Lumpur have no response so no contact

even operation MAS operation aah... has no contact.

2028:42 UTC [0428:42 MYT]

HCM ACC Yeah until now.

2028:44 UTC [0428:44 MYT]

KL ACC Until now yes until now so.

2028:46 UTC [0428:46 MYT]

HCM ACC Operation from Malaysia Malaysian Airlines.

2028:48 UTC [0428:48 MYT]

KL ACC Yes operation from Malaysian Airlines there is no

contact with the aircraft so they try they try anything I call you and so if you have anything also you inform me

okay.

2028:58 UTC [0428:58 MYT]

HCM ACC Yea...that is right.

AIR-GROUND COMMUNICATION LUMPUR RADAR - FREQUENCY 132.6 MHz

AIR-GROUND COMMUNICATION LUMPUR RADAR - FREQUENCY 132.6 MHz AND RADAR DIRECT LINE COMMUNICATION **CONTENT - OTHER FLIGHTS**

TIME & **SOURCE** AND RADAR DIRECT LINE COMMUNICATION **CONTENT - MAS 370**

TIME & **SOURCE**

2029:00 UTC [0429:00 MYT] KL ACC

Okay okay take immediate action take action then okay thank you.

End of Direct Line Telephone Conversation Between KL ACC and HCM ACC

> 2030:40 UTC [0430:40 MYT]

SIA 67

Singapore Six Seven request descend.

2030:44 UTC

[0430:44 MYT]

Lumpur Radar

Aah... Singapore Six Seven contact now one two three

decimal seven.

2030:48 UTC

[0430:48 MYT]

SIA 67

Confirm is one two three decimal seven.

2030:52 UTC

[0430:52 MYT]

Lumpur Radar That is affirm one two three decimal seven.

2030:55 UTC

[0430:55 MYT]

Jumpa lagi Singapore Six Seven. SIA 67

TIME &

SOURCE

AIR-GROUND COMMUNICATION LUMBUD DADAD - EDECUENCY 132 6 MHz

AIR-GROUND COMMUNICATION LUMPUR RADAR - FREQUENCY 132.6 MHz AND RADAR DIRECT LINE COMMUNICATION **CONTENT - OTHER FLIGHTS**

LUMPUR RADAR - FREQUENCY 132.0 MHz	
AND RADAR DIRECT LINE COMMUNICATION	TIME &
CONTENT - MAS 370	SOURCE

2030:57 UTC [0430:57 MYT] Lumpur Radar	See you.
2035:12 UTC [0435:12 MYT] MAS 386	Malaysian Three Eight One approaching one five zero.
2035:17 UTC [0435:17 MYT] Lumpur Radar	Three Eight One contact Approach on one two one decimal two five.
2035:20 UTC [0435:20 MYT] MAS 386	One two one two five Malaysian aaa Three Eight Six good morning.
2035:24 UTC [0435:24 MYT] Lumpur Radar	Morning.
2035:28 UTC [0435:28 MYT] AXM 1019	Lumpur Control good evening Express One Zero One Niner eer Descend to flight level three six zero squawk three one three zero.

TIME & SOURCE	AIR-GROUND COMMUNICATION LUMPUR RADAR - FREQUENCY 132.6 MHz AND RADAR DIRECT LINE COMMUNICATION CONTENT - MAS 370	TIME & SOURCE	AIR-GROUND COMMUNICATION LUMPUR RADAR - FREQUENCY 132.6 MHz AND RADAR DIRECT LINE COMMUNICATION CONTENT - OTHER FLIGHTS
		2035:37 UTC [0435:37 MYT] Lumpur Radar	One Zero One Nine Control idenitfied track direct to Pibos for Nipah Three Alpha Arrival Pibos Alpha Transition Runway Three Two Right descend to flight level one five zero.
		2035:48 UTC [0435:48 MYT] AXM 1019	Aaa when ready descend to flight level one five zero Pibos aa Runway Three Two Right for Nipah Three Alpha Arrival, Express One Zero One Niner when available request track direct Pibos.
		2036:00 UTC [0436:00 MYT] Lumpur Radar	Roger will advise.
		2036:23 UTC [0436:23 MYT] Lumpur Radar	Singapore Four Four Seven contact Singapore now one two three decimal seven.

Three seven Singapore Four Four Seven selamat pagi.

2036:28 UTC [0436:28 MYT]

SIA 447

TIME &

AIR-GROUND COMMUNICATION LUMPUR RADAR - FREQUENCY 132.6 MHz AND RADAR DIRECT LINE COMMUNICATION CONTENT. MAS 370

AIR-GROUND COMMUNICATION LUMPUR RADAR - FREQUENCY 132.6 MHz AND RADAR DIRECT LINE COMMUNICATION CONTENT - OTHER FLIGHTS

SOURCE	CONTENT - MAS 370	SOURCE	CONTENT - OTHER FLIGHTS
		2036:32 UTC	
		[0436:32 MYT] Lumpur Radar	Pagi.
		2039:45 UTC [0439:45 MYT]	
		GSB 304	Lumpur Radar good morning Gading Three Zero Four on the climb to level one eight zero passing one one seven squawking two one three five direct Victor Papa Kilo.
		2039:54 UTC [0439:54 MYT]	
		Lumpur Radar	Morning Gading Three Zero Four direct Victor Papa Kilo climb two niner zero.
		2040:00 UTC [0440:00 MYT]	
		GSB 304	Direct Victor Papa Kilo climb two niner zero Gading Three Zero Four.
		2041:22 UTC [0441:22 MYT]	
		AXM 1019	Aah Express One Zero One Niner standing by direct Nipah.

TIME &

AIR-GROUND COMMUNICATION LUMPUR RADAR - FREQUENCY 132.6 MHz AND RADAR DIRECT LINE COMMUNICATION CONTENT - MAS 370

AIR-GROUND COMMUNICATION LUMPUR RADAR - FREQUENCY 132.6 MHz AND RADAR DIRECT LINE COMMUNICATION CONTENT - OTHER FLIGHTS

TIME & SOURCE	AND RADAR DIRECT LINE COMMUNICATION CONTENT - MAS 370	TIME & SOURCE	AND RADAR DIRECT LINE COMMUNICATION CONTENT - OTHER FLIGHTS
		2041:29 UTC [0441:29 MYT] Lumpur Radar	
			Zero One Niner track direct to Pibos initially, I got traffic tracking direct to Victor Papa Kilo advise when clear.
		2041:37 UTC [0441:37 MYT]	
		AXM 1019	Roger standing by.
		2042:09 UTC [0442:09 MYT]	
		Lumpur Radar	One Zero One Nine fly heading two four zero initially.
		2042:14 UTC [0442:14 MYT]	
		AXM 1019	Heading two four zero Express One Zero One Nine.
		2046:13 UTC [0446:13 MYT]	
		Lumpur Radar	One Zero One Nine track direct to Nipah.
		2046:16 UTC [0446:16 MYT]	
		AXM 1019	Track direct Nipah One Zero One Nine.

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	AIR-GROUND COMMUNICATION
	LUMPUR RADAR - FREQUENCY 132.6 MHz
TIME &	AND RADAR DIRECT LINE COMMUNICATION
SOURCE	CONTENT - MAS 370

AIR-GROUND COMMUNICATION LUMPUR RADAR - FREQUENCY 132.6 MHz AND RADAR DIRECT LINE COMMUNICATION CONTENT - OTHER FLIGHTS

[0449:28 MYT] Lumpur Radar	Express One Zero One Nine contact Approach one two one two five.
2049:32 UTC [0449:32 MYT] AXM 1019	One two one two five good day Express One Zero One Nine.
2049:35 UTC [0449:35 MYT] Lumpur Radar	Day.
2054:37 UTC [0454:37 MYT] GSB 304	Gading Three Zero Four request climb to flight level three three zero.
2054:43 UTC [0454:43 MYT] Lumpur Radar	Three Zero Four contact Singapore now on one two three decimal seven.
2054:47 UTC [0454:47 MYT] GSB 304	Singapore one two three decimal seven Gading Sari Three Zero Four.

TIME &

SOURCE

2049:28 UTC

AIR-GROUND COMMUNICATION LUMPUR RADAR - FREQUENCY 132.6 MHz AND RADAR DIRECT LINE COMMUNICATION

AIR-GROUND COMMUNICATION
LUMPUR RADAR - FREQUENCY 132.6 MHz
AND RADAR DIRECT LINE COMMUNICATION
CONTENT - OTHER FLIGHTS

TIME & SOURCE	AND RADAR DIRECT LINE COMMUNICATION CONTENT - MAS 370	TIME & SOURCE	AND RADAR DIRECT LINE COMMUNICATION CONTENT - OTHER FLIGHTS
		2054:50 UTC [0454:50 MYT] Lumpur Radar	Good day.
		2104:32 UTC [0504:32 MYT] GSB 306	Lumpur Control selamat pagi Gading Sari Three Zero Six passing one zero thousand.
		2104:37 UTC [0504:37 MYT] Lumpur Radar	Morning Gading Sari Three Zero Six climb level two seven zero direct Victor Papa Kilo.
		2104:41 UTC [0504:41 MYT] GSB 306	Seven zero direct Papa Kilo Gading Sari Three Zero Six terima kasih.
		2105:27 UTC [0505:27 MYT] Lumpur Radar	Gading Three Zero Six climb flight level two niner zero.
		2105:32 UTC [0505:32 MYT] GSB 306	Continue climb two nine zero Gading Sari Three Zero Six.

AIR-GROUND COMMUNICATION LUMPUR RADAR - FREQUENCY 132.6 MHz AND DADAD DIDECT I INC COMMUNICATION

AIR-GROUND COMMUNICATION LUMPUR RADAR - FREQUENCY 132.6 MHz AND DADAD DIDECT I INC COMMUNICATION

TIME & SOURCE	AND RADAR DIRECT LINE COMMUNICATION CONTENT - MAS 370	TIME & SOURCE	AND RADAR DIRECT LINE COMMUNICATION CONTENT - OTHER FLIGHTS
		2108:19 UTC [0508:19 MYT] SIA 345	Lumpur Singapore Three Four Five ah selamat pagi maintaining flight level three niner zero.
		2108:26 UTC [0508:26 MYT] Lumpur Radar	Singapore Three Four Five maintain flight level three niner zero.
		2108:29 UTC [0508:29 MYT] THAI 462	Thai Four Six Two flight level three eight zero.
		2108:36 UTC [0508:36 MYT] Lumpur Radar	Thai Four Six Two flight level three eight zero report TIDAR.
		2108:39 UTC [0508:39 MYT] THAI 462	Maintain three eight zero report TIDAR Thai Four Six Two.
		2113:36 UTC [0513:36 MYT] Lumpur Radar	The Thai Four Six Two contact Bangkok now one two three niner five.

TIME & SOURCE	AIR-GROUND COMMUNICATION LUMPUR RADAR - FREQUENCY 132.6 MHz AND RADAR DIRECT LINE COMMUNICATION CONTENT - MAS 370	TIME & SOURCE	AIR-GROUND COMMUNICATION LUMPUR RADAR - FREQUENCY 132.6 MHz AND RADAR DIRECT LINE COMMUNICATION CONTENT - OTHER FLIGHTS
		2113:43 UTC [0513:43 MYT] THAI 462	Bangkok one two three nine five good day Thai Four Six Two.
		2113:47 UTC [0513:47 MYT] Lumpur Radar	Good day.
		2113:51 UTC [0513:51 MYT] Lumpur Radar	Gading Sari Three Zero Five contact Singapore now one two three decimal seven.
		2113:56 UTC [0513:56 MYT] GSB 305	Singapore one two three seven (xxxx) [illegible] sir.
		2113:58 UTC [0513:58 MYT] Lumpur Radar	Aah.
2118:32 UTC	Direct Line Telephone Conversation Between KL ACC and HCM ACC		
[0518:32 MYT] KL ACC	Lumpur.		

AIR-GROUND COMMUNICATION
LUMPUR RADAR - FREQUENCY 132.6 MHz

AIR-GROUND COMMUNICATION
LUMPUR RADAR - FREQUENCY 132.6 MHz
AND RADAR DIRECT LINE COMMUNICATION
CONTENT - OTHER FLIGHTS

TIME & AND RADAR DIRECT LINE COMMUNICATION TO SOURCE CONTENT - MAS 370 S

TIME & SOURCE

2118:34 UTC

[0518:34 MYT] HCM ACC

Yeah, Lumpur any news information for Malaysian

Three Seven Zero from Malaysian Airlines.

2118:40 UTC

[0518:40 MYT]

KL ACC No nothing no news no news.

2118:42 UTC

[0518:42 MYT]

HCM ACC Aah nothing right.

2118:44 UTC

[0518:44 MYT]

KL ACC So how about your side is there any news from Hong

Kong or Beijing any news.

2118:48 UTC

[0518:48 MYT]

HCM ACC I am waiting for them but aaa No reply right now.

2118:52 UTC

[0518:52 MYT]

KL ACC No reply naa...

2118:53 UTC

[0518:53 MYT]

HCM ACC Yeah no reply yeah.

AIR-GROUND COMMUNICATION LUMPUR RADAR - FREQUENCY 132.6 MHz

AIR-GROUND COMMUNICATION
LUMPUR RADAR - FREQUENCY 132.6 MHz
AND RADAR DIRECT LINE COMMUNICATION
CONTENT - OTHER FLIGHTS

TIME & AND RADAR DIRECT LINE COMMUNICATION
SOURCE CONTENT - MAS 370

TIME & SOURCE

2118:54 UTC

[0518:54 MYT]

KL ACC I see I see so...

2118:55 UTC

[0518:55 MYT]

HCM ACC I am waiting for them and waiting for you too.

2118:57 UTC

[0518:57 MYT]

KL ACC No I am waiting from your side also aa ah.

2118:59 UTC

[0518:59 MYT]

HCM ACC Ah ha yeah.

2119:00 UTC

[0519:00 MYT]

KL ACC Okay who ever got the news all this thing please be

informed aah.

2119:03 UTC

[0519:03 MYT]

HCM ACC Yeah.

AIR-GROUND COMMUNICATION LUMPUR RADAR - FREQUENCY 132.6 MHz

AIR-GROUND COMMUNICATION
LUMPUR RADAR - FREQUENCY 132.6 MHz
AND RADAR DIRECT LINE COMMUNICATION

CONTENT - OTHER FLIGHTS

TIME & SOURCE

AND RADAR DIRECT LINE COMMUNICATION

CONTENT - MAS 370

TIME & SOURCE

2119:04 UTC [0519:04 MYT]

KL ACC Okay okay sorry okay right.

End of Direct Line Telephone Conversation
Between KL ACC and HCM ACC

RINGING AT 2120:08 UTC [0520:08 MYT]

ANSWERED BY MAS OPS: 2120:16 UTC [0521:16 MYT]

Direct Line Telephone Conversation Between KL ACC and MAS Operation

2120:16 UTC

[0520:16 MYT]

MAS Operations Morning.

2120:17 UTC

[0520:17 MYT]

KL ACC Morning Mas ops aaa centre here any news on Eight

Seven Zero.

2120:20 UTC

[0520:20 MYT]

MAS Operations Negative sir ... still ... we are ...haa.

AIR-GROUND COMMUNICATION LUMPUR RADAR - FREQUENCY 132.6 MHz

AIR-GROUND COMMUNICATION
LUMPUR RADAR - FREQUENCY 132.6 MHz
AND RADAR DIRECT LINE COMMUNICATION
CONTENT - OTHER FLIGHTS

TIME & AND RADAR DIRECT LINE COMMUNICATION SOURCE CONTENT - MAS 370

TIME & SOURCE

2120:23 UTC [0520:23 MYT]

KL ACC I see.

2120:23 UTC [0520:23 MYT]

MAS Operations This is aaa... actually I don't know how to explain but we

are under aa... mode very stressful mode down here.

2120:35 UTC [0520:35 MYT]

KL ACC Yeah yeah laa because even Ho Chi Minh.

2120:38 UTC [0520:38 MYT]

MAS Operations Okay boss.

2120:39 UTC [0520:39 MYT]

KL ACC Aah.

2120:39 UTC [0520:39 MYT]

MAS Operations Just hang on my xxxx [name redacted] want to talk to you.

2120:42 UTC [0520:42 MYT]

KL ACC Okay okay.

AIR-GROUND COMMUNICATION LUMPUR RADAR - FREQUENCY 132.6 MHz

AIR-GROUND COMMUNICATION
LUMPUR RADAR - FREQUENCY 132.6 MHz
AND RADAR DIRECT LINE COMMUNICATION
CONTENT - OTHER FLIGHTS

TIME & AND RADAR DIRECT LINE COMMUNICATION SOURCE CONTENT - MAS 370

TIME & SOURCE

2120:44 UTC

[0520:44 MYT]

MAS Operations Good morning xxx xxx [name redacted] here who's on the

line please.

2120:46 UTC

[0520:46 MYT]

KL ACC Good morning I am xxxx [name redacted] here from Air

Traffic Control Centre.

2120:47 UTC

[0520:47 MYT]

MAS Operations xxxx [name redacted] is aah xxxx [name redacted] on

duty aa takda.

2120:51 UTC

[0520:51 MYT]

KL ACC Yeah.

2120:52 UTC

[0520:52 MYT]

MAS Operations xxxx xxxx [name redacted]

2120:54 UTC

[0520:54 MYT]

KL ACC xxxxx [name redacted] takda hari ini.

2120:55 UTC

[0520:55 MYT]

MAS Operations Takda aaa I SMS him I think he's still sleeping anyway.

AIR-GROUND COMMUNICATION LUMPUR RADAR - FREQUENCY 132.6 MHz

AIR-GROUND COMMUNICATION
LUMPUR RADAR - FREQUENCY 132.6 MHz
AND RADAR DIRECT LINE COMMUNICATION
CONTENT - OTHER FLIGHTS

TIME & SOURCE

AND RADAR DIRECT LINE COMMUNICATION TIME &

CONTENT - MAS 370 SOURCE

2120:57 UTC [0520:57 MYT]

KL ACC haa.

2120:58 UTC [0520:58 MYT]

MAS Operations aem... Can you please tell me.

2121:01 UTC [0521:01 MYT]

KL ACC Aaa...

2121:02 UTC [0521:02 MYT]

MAS Operations The aaa... (coughing) is the aircraft aaah... had a

positive aaah... reply to handover to Ho Chi Minh.

2121:12 UTC [0521:12 MYT]

KL ACC Aah... I see because I... I ... took over roughly three

three something I, I am not sure about it I can't say I....I

can't I, I don't want to commit lah.

2121:22 UTC [0521:22 MYT]

MAS Operations Okay.

AIR-GROUND COMMUNICATION LUMPUR RADAR - FREQUENCY 132.6 MHz

AIR-GROUND COMMUNICATION
LUMPUR RADAR - FREQUENCY 132.6 MHz
AND RADAR DIRECT LINE COMMUNICATION
CONTENT - OTHER FLIGHTS

TIME & AND RADAR DIRECT LINE COMMUNICATION TIME & SOURCE CONTENT - MAS 370 SOURCE

2121:22 UTC [0521:22 MYT]

KL ACC aah.

2121:23 UTC

[0521:23 MYT]

MAS Operations fine, fair enough.

2121:23 UTC

[0521:23 MYT]

KL ACC ah but.

2121:24 UTC

[0521:24 MYT]

MAS Operations can you find out

2121:25 UTC

[0521:25 MYT]

KL ACC ah

2121:25 UTC

[0521:25 MYT]

MAS Operations with the previous controller

2121:26 UTC

[0521:26 MYT]

KL ACC ah

AIR-GROUND COMMUNICATION LUMPUR RADAR - FREQUENCY 132.6 MHz

AIR-GROUND COMMUNICATION
LUMPUR RADAR - FREQUENCY 132.6 MHz
AND RADAR DIRECT LINE COMMUNICATION
CONTENT - OTHER FLIGHTS

TIME & AND RADAR DIRECT LINE COMMUNICATION SOURCE CONTENT - MAS 370

TIME & SOURCE

2121:26 UTC

[0521:26 MYT]

MAS Operations or your system record,

2121:28 UTC

[0521:28 MYT]

KL ACC aah ha

2121:29 UTC

[0521:29 MYT]

MAS Operation I suggest aaa... whatever we have here.

2121:32 UTC

[0521:32 MYT]

KL ACC hm.

2121:33 UTC

[0521:33 MYT]

MAS Operations Suggest that the aircraft had never leave Lumpur

airspace, okay.

2121:41 UTC

[0521:41 MYT]

KL ACC Had never leave Lumpur airspce.

2121:42 UTC

[0521:42 MYT]

MAS Operations Yea he have not left Lumpur airspace because he has

failed to call Ho Chi Minh.

AIR-GROUND COMMUNICATION LUMPUR RADAR - FREQUENCY 132.6 MHz

AIR-GROUND COMMUNICATION
LUMPUR RADAR - FREQUENCY 132.6 MHz
AND RADAR DIRECT LINE COMMUNICATION
CONTENT - OTHER FLIGHTS

TIME & AND RADAR DIRECT LINE COMMUNICATION SOURCE CONTENT - MAS 370

TIME & SOURCE

2121:48 UTC [0521:48 MYT]

KL ACC Aah.

2121:49 UTC

[0521:49 MYT]

MAS Operations That's what that's what Ho Chi Minh said lah,

2121:51 UTC

[0521:51 MYT]

KL ACC hm hm hm,

2121:51 UTC

[0521:51 MYT]

MAS Operations Is it confirm or not you don't know lah,

2121:53 UTC

[0521:53 MYT]

KL ACC No I don't know but I, I check I check with Ho Chi Minh.

2121:57 UTC

[0521:57 MYT]

MAS Operations aaa.

2121:58 UTC

[0521:58 MYT]

KL ACC Aah I check with Ho Chi Minh he said he he observed on

radar.

AIR-GROUND COMMUNICATION LUMPUR RADAR - FREQUENCY 132.6 MHz

AIR-GROUND COMMUNICATION
LUMPUR RADAR - FREQUENCY 132.6 MHz
AND RADAR DIRECT LINE COMMUNICATION
CONTENT - OTHER FLIGHTS

TIME & SOURCE

AND RADAR DIRECT LINE COMMUNICATION

CONTENT - MAS 370

2122:04 UTC [0522:04 MYT]

MAS Operations aah...

2122:05 UTC

[0522:05 MYT] KL ACC

Somewhere BITOD the aaa... IGARI, BITOD, BITOD side that's mean under under Ho Chi minh airspace.

2122:10 UTC [0522:10 MYT]

MAS Operations They observed it on radar until BITOD.

2122:13 UTC [0522:13 MYT]

KL ACC Aaa... somewhere BITOD they said few seconds only

there just a blip there then I, I asked him what level was

the aircraft.

2122:19 UTC [0522:19 MYT]

MAS Operations Aaa,

2122:20 UTC [0522:20 MYT]

KL ACC Then he said level three five zero that that mean true lah,

based on aaa because aircraft was flying on three five

zero.

TIME &

SOURCE

AIR-GROUND COMMUNICATION LUMPUR RADAR - FREQUENCY 132.6 MHz

AIR-GROUND COMMUNICATION
LUMPUR RADAR - FREQUENCY 132.6 MHz
AND RADAR DIRECT LINE COMMUNICATION
CONTENT - OTHER FLIGHTS

TIME & SOURCE

AND RADAR DIRECT LINE COMMUNICATION TIME &

CONTENT - MAS 370 SOURCE

2122:26 UTC

[0522:26 MYT]

MAS Operations Okay.

2122:27 UTC

[0522:27 MYT]

KL ACC Aah.

2122:27 UTC

[0522:27 MYT]

MAS Operations All the FIR further down the line,

2122:29 UTC

[0522:29 MYT]

KL ACC Aah

2122:30 UTC

[0522:30 MYT]

MAS Operations Has aah fail to pick up aaa... pick it up on radar and

communication.

2122:36 UTC

[0522:36 MYT]

KL ACC Ehem.

2122:37 UTC

[0522:37 MYT]

MAS Operations So one when was the last communication Ho Chi Minh.

AIR-GROUND COMMUNICATION LUMPUR RADAR - FREQUENCY 132.6 MHz

AIR-GROUND COMMUNICATION
LUMPUR RADAR - FREQUENCY 132.6 MHz
AND RADAR DIRECT LINE COMMUNICATION

CONTENT - OTHER FLIGHTS

TIME & SOURCE

KL ACC

AND RADAR DIRECT LINE COMMUNICATION TIME &

CONTENT - MAS 370 SOURCE

2122:42 UTC [0522:42 MYT]

Ya leh last communicatin I also I can't say because based on radar now... nowaday kan...nowaday last communication whenever you talk with the aircraft we didn't we didn't put in the time the timing normally no timing no timing we ar ar ar no.

2122:58 UTC [0522:58 MYT]

MAS Operations I suggest

2122:59 UTC [0522:59 MYT]

KL ACC Aah

2122:59 UTC [0522:59 MYT]

MAS Operations I suggest,

2123:01 UTC [0523:01 MYT]

KL ACC Yes yes.

2123:02 UTC [0523:02 MYT]

MAS Operations You get,

AIR-GROUND COMMUNICATION LUMPUR RADAR - FREQUENCY 132.6 MHz

AIR-GROUND COMMUNICATION
LUMPUR RADAR - FREQUENCY 132.6 MHz
AND RADAR DIRECT LINE COMMUNICATION
CONTENT - OTHER FLIGHTS

TIME & SOURCE

AND RADAR DIRECT LINE COMMUNICATION TIME &

CONTENT - MAS 370 SOURCE

2123:02 UTC [0523:02 MYT] KL ACC

I. I.

2123:03 UTC [0523:03 MYT]

MAS Operations Try to trace back the record.

2123:04 UTC [0523:04 MYT]

KL ACC Aaa I see, I see yeah.

2123:05 UTC [0523:05 MYT]

MAS Operations Voice record.

2123:06 UTC [0523:06 MYT]

KL ACC Aah.

2123:06 UTC [0523:06 MYT]

MAS Operations Aaa what time was that positive hand over.

2123:09 UTC [0523:09 MYT]

KL ACC Ya.

AIR-GROUND COMMUNICATION LUMPUR RADAR - FREQUENCY 132.6 MHz

AIR-GROUND COMMUNICATION
LUMPUR RADAR - FREQUENCY 132.6 MHz
AND RADAR DIRECT LINE COMMUNICATION
CONTENT - OTHER FLIGHTS

TIME & AND RADAR DIRECT LINE COMMUNICATION SOURCE CONTENT - MAS 370

TIME & SOURCE

2123:10 UTC

[0523:10 MYT]

MAS Operations To Ho Chi Minh because we need to know where is the

aircraft you know.

2123:13 UTC

[0523:13 MYT]

KL ACC Okay okay okay I got it.

2123:14 UTC

[0523:14 MYT]

MAS Operations This this I appreciate you tell me that that the radar blip

at BITOD.

2123:18 UTC

[0523:18 MYT]

KL ACC Aaaa... never mind laa I wake up my supervisor and ask

him to check again to go to the room and check what

what the last contact all this thing lah.

2123:27 UTC

[0523:27 MYT]

MAS Operations Yes.

2123:27 UTC

[0523:27 MYT]

KL ACC I will ask them to check la.

AIR-GROUND COMMUNICATION LUMPUR RADAR - FREQUENCY 132.6 MHz

AIR-GROUND COMMUNICATION
LUMPUR RADAR - FREQUENCY 132.6 MHz
AND RADAR DIRECT LINE COMMUNICATION
CONTENT - OTHER FLIGHTS

TIME & SOURCE

AND RADAR DIRECT LINE COMMUNICATION
CONTENT - MAS 370

TIME & SOURCE

2123:29 UTC

[0523:29 MYT]

MAS Operations Okay.

2123:29 UTC

[0523:29 MYT]

KL ACC Okay okay who is on the line?

2123:30 UTC

[0523:30 MYT]

2123:33 UTC

[0523:33 MYT]

KL ACC Aah.. hold on hold on

2123:34 UTC

[0523:34 MYT]

MAS Operations Zero one two.

2123:34 UTC

[0523:34 MYT]

KL ACC Hold on hold on yeah aaa eee hmm.... aaa...xxxxx xxxx

[name redacted] aaa okay zero one two.

2123:46 UTC

[0523:46 MYT]

MAS Operations xxx xxx xxx [number redacted]

AIR-GROUND COMMUNICATION LUMPUR RADAR - FREQUENCY 132.6 MHz

AIR-GROUND COMMUNICATION
LUMPUR RADAR - FREQUENCY 132.6 MHz
AND RADAR DIRECT LINE COMMUNICATION
CONTENT - OTHER FLIGHTS

TIME & SOURCE

AND RADAR DIRECT LINE COMMUNICATION

CONTENT - MAS 370

2123:47 UTC [0523:47 MYT]

KL ACC xxx xxx xxxx [number redacted]

2123:48 UTC

[0523:48 MYT]

MAS Operations xxx xxx xxx xxxx [number redacted]

2123:50 UTC

[0523:50 MYT]

KL ACC xxx xxx xxx xxxx [number redacted] aah

2123:53 UTC

[0523:53 MYT]

MAS Operations Okay xxxxx [name redacted] how do I get you?

2123:54 UTC

[0524:54 MYT]

KL ACC Aah.. okay you keep give my centre centre number.

2123:57 UTC

[0523:57 MYT]

MAS Operations Okay what is the number please.

2123:59 UTC

[0523:59 MYT]

KL ACC Aah...hold on naa

TIME &

SOURCE

AIR-GROUND COMMUNICATION LUMPUR RADAR - FREQUENCY 132.6 MHz

AIR-GROUND COMMUNICATION
LUMPUR RADAR - FREQUENCY 132.6 MHz
AND RADAR DIRECT LINE COMMUNICATION
CONTENT - OTHER FLIGHTS

TIME & SOURCE

AND RADAR DIRECT LINE COMMUNICATION
CONTENT - MAS 370

TIME & SOURCE

2124:14 UTC

[0524:14 MYT]

Source unknown "Eeh eeh up up" "via Papa Kilo" (background voice)

2124:18 UTC

[0524:18 MYT]

KL ACC xxxxxxxx okay xxxx xxxx [number redacted]

2124:24 UTC

[0524:24 MYT]

MAS Operations ahm

2124:25 UTC

[0524:25 MYT]

KL ACC xxx xxx aah xxx xxx [number redacted]

2124:29 UTC

[0524:29 MYT]

MAS Operations Sorry xxx xxx xxx [number redacted]

2124:30 UTC

[0524:30 MYT]

KL ACC xxx xxx xxx xxx xxx [number redacted] hold on hold on.

2124:33 UTC [0524:33 MYT]

JSA 20

Lumpur good morning Jet Airways Two Zero flight level

three seven zero squawk zero five one five

AIR-GROUND COMMUNICATION LUMPUR RADAR - FREQUENCY 132.6 MHz

AIR-GROUND COMMUNICATION
LUMPUR RADAR - FREQUENCY 132.6 MHz
AND RADAR DIRECT LINE COMMUNICATION
CONTENT - OTHER FLIGHTS

TIME & SOURCE

AND RADAR DIRECT LINE COMMUNICATION

CONTENT - MAS 370

TIME & SOURCE

2124:38 UTC [0524:38 MYT] KL ACC

Hold on aah

Controller answering aircraft's transmission

2124:39 UTC [0524:39 MYT]

Lumpur Radar Jets Airway Two Zero Control morning identified

maintain level three seven zero.

2124:43 UTC [0524:43 MYT]

JSA 20 Maintain three seven zero Jets Airway Two Zero.

2124:49 UTC [0524:49 MYT]

KL ACC Aaa halo

2124:50 UTC [0524:50 MYT]

MAS Operations Ya

2124:51 UTC [0524:51 MYT]

KL ACC Halo xxx xxx xxx xxxx [number redacted]

2124:53 UTC [0524:53 MYT]

MAS Operations xxx xxx xxx xxx [number redacted]

AIR-GROUND COMMUNICATION LUMPUR RADAR - FREQUENCY 132.6 MHz

AIR-GROUND COMMUNICATION
LUMPUR RADAR - FREQUENCY 132.6 MHz
AND RADAR DIRECT LINE COMMUNICATION
CONTENT - OTHER FLIGHTS

TIME & AND RADAR DIRECT LINE COMMUNICATION SOURCE CONTENT - MAS 370

TIME & SOURCE

2124:54 UTC [0524:54 MYT]

KL ACC xxx xxx xxx xxx [number redacted]

2124:55 UTC

[0524:55 MYT]

MAS Operations xxx xxx xxx xxx [number redacted] aah

2124:56 UTC

[0524:56 MYT]

KL ACC hm hm

2124:58 UTC

[0524:58 MYT]

MAS Operations Okay thank you.

2124:59 UTC

[0524:59 MYT]

KL ACC Okay right.

End of Direct Line Telephone Conversation Between KL ACC and MAS Operations Centre

2132:03 UTC [0532:03 MYT]

SIA 345

Lumpur SingporeThree Four Five request descend.

[0541:20 MYT]

Lumpur

KL ACC

TIME & SOURCE	AIR-GROUND COMMUNICATION LUMPUR RADAR - FREQUENCY 132.6 MHz AND RADAR DIRECT LINE COMMUNICATION CONTENT - MAS 370	TIME & SOURCE	AIR-GROUND COMMUNICATION LUMPUR RADAR - FREQUENCY 132.6 MHz AND RADAR DIRECT LINE COMMUNICATION CONTENT - OTHER FLIGHTS
		2132:07 UTC [0532:07 MYT] Lumpur Radar	Singapore Three Four Five contact Singpore one two three decimal seven.
		2132:11 UTC [0532:11 MYT] SIA 345	One two three seven good day.
		2132:53 UTC [0532:53 MYT] SIA 517	Eer Lumpur Control good morning Singapore Five One seven flight level three niner zero.
		2133:00 UTC [0533:00 MYT] Lumpur Radar	Morning Singapore Five One Seven Control identfied maintain level three nine zero.
		2133:04 UTC [0533:04 MYT] SIA 517	Three nine zero Singapore Five one Seven.
	Direct Line Telephone Conversation Between KL ACC and HCM ACC		
2141:20 UTC			

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AIR-GROUND COMMUNICATION LUMPUR RADAR - FREQUENCY 132.6 MHz

CONTENT - MAS 370

TIME & AND RADAR DIRECT LINE COMMUNICATION SOURCE

AIR-GROUND COMMUNICATION LUMPUR RADAR - FREQUENCY 132.6 MHz AND RADAR DIRECT LINE COMMUNICATION **CONTENT - OTHER FLIGHTS**

2141:21 UTC

TIME &

SOURCE

[0541:21 MYT] **HCM ACC**

Ho Chi Minh ACC aah any information about Malaysian

Three Seven Zero from the company.

2141:27 UTC [0541:27 MYT] KL ACC

Negative company is checking with me also and negative no no information about it no information about it so we

are checking we are playing back back the tape we are we want to track back where the aircraft when was the last contact all this thing we too we play we play the tape

and if there is informatin we inform you.

2141:49 UTC [0541:49 MYT]

HCM ACC Roger.

2141:50 UTC [0541:50 MYT]

KL ACC Okay okay then if there any from your side or from the

Beiing side all this thing you inform Lumpur please.

2141:56 UTC [0541:56 MYT]

HCM ACC Okay any information will advise you.

AIR-GROUND COMMUNICATION LUMPUR RADAR - FREQUENCY 132.6 MHz

AIR-GROUND COMMUNICATION LUMPUR RADAR - FREQUENCY 132.6 MHz AND RADAR DIRECT LINE COMMUNICATION **CONTENT - OTHER FLIGHTS**

TIME & **SOURCE** AND RADAR DIRECT LINE COMMUNICATION **CONTENT - MAS 370**

SOURCE

2141:59 UTC [0541:59 MYT] KL ACC

Yap, okay okay.

End of Direct Line Telephone Conversation Between KL ACC and HCM ACC

2147:38 UTC [0547:38 MYT]

TIME &

JSA 20 (xxxx) (xxxx) [illegible] Jets Airway Two Zero.

2147:48 UTC

[0547:48 MYT]

JSA 20 Lumpur Jets Airway Two Zero.

2147:51 UTC

[0547:51 MYT]

Lumpur Radar Jets Airway Two Zero contact Singapore one two three

seven for descend.

2147:55 UTC

[0547:55 MYT]

JSA 20 Singapore one two three seven good day.

2151:25 UTC

[0551:25 MYT]

Lumpur Radar Singapore Five One Seven naa change squawk zero

four two six and contact Singapore now one two three

decimal seven.

AIR-GROUND COMMUNICATION LUMPUR RADAR - FREQUENCY 132.6 MHz AND RADAR DIRECT LINE COMMUNICATION CONTENT - MAS 370

AIR-GROUND COMMUNICATION
LUMPUR RADAR - FREQUENCY 132.6 MHz
AND RADAR DIRECT LINE COMMUNICATION
CONTENT - OTHER FLIGHTS

TIME & SOURCE	AND RADAR DIRECT LINE COMMUNICATION CONTENT - MAS 370	TIME & SOURCE	AND RADAR DIRECT LINE COMMUNICATION CONTENT - OTHER FLIGHTS
		2151:33 UTC [0551:33 MYT] SIA 517	Squawk on zero four two six and one two three seven Singapore Five One Seven good day.
		2151:40 UTC [0551:40 MYT] Lumpur Radar	One Seven good day.
		2152:16 UTC [0552:16 MYT] Thai Piece 920	Lumpur Control Thai Peace Niner Two Zero good morning maintain three eight zero approaching Victor Papa Kilo squawk two three four two.
		2152:27 UTC [0552:27 MYT] Lumpur Radar	(xxx) (xxx) (xxx) [illegible] Nine Two Zero control maintain three eight zero.
		2152:32 UTC [0552:32 MYT] Thai Piece 920	Maintain three eight zero Thai Peace Nine Two Zero.
		2152:36 UTC [0552:36 MYT] Lumpur Radar	Thai Peace Nine Two Zero.

AIR-GROUND COMMUNICATION LUMPUR RADAR - FREQUENCY 132.6 MHz AND RADAR DIRECT LINE COMMUNICATION

AIR-GROUND COMMUNICATION
LUMPUR RADAR - FREQUENCY 132.6 MHz
AND RADAR DIRECT LINE COMMUNICATION
CONTENT - OTHER FLIGHTS

TIME & SOURCE	AND RADAR DIRECT LINE COMMUNICATION CONTENT - MAS 370	TIME & SOURCE	AND RADAR DIRECT LINE COMMUNICATION CONTENT - OTHER FLIGHTS
		2153:13 UTC [0553:13 MYT]	
		AXM 1012	Lumpur Radar Express One Zero One Two good morning climbing level one eight zero direct IGARI.
		2153:21 UTC [0553:21 MYT] Lumpur Radar	Good morning aa Express One Zero One Two Control
		Lumpur Radar	identified climb to flight level three five zero.
		2153:26 UTC [0553:26 MYT]	
		AXM 1012	Three five zero Asian Express One Zero One Two.
		2153:34 UTC [0553:34 MYT]	
		AXM 1012	Asian Express One Zero One Two request direct to BITOD.
		2153:37 UTC [0553:37 MYT] Lumpur Radar	One Zero One Two track IGARI initially.
		2153:40 UTC	,
		[0553:40 MYT] AXM 1012	Asian One Zero One Seven.

AIR-GROUND COMMUNICATION
LUMPUR RADAR - FREQUENCY 132.6 MHz
AND RADAR DIRECT LINE COMMUNICATION
CONTENT - MAS 370

AIR-GROUND COMMUNICATION
LUMPUR RADAR - FREQUENCY 132.6 MHz
AND RADAR DIRECT LINE COMMUNICATION
CONTENT - OTHER FLIGHTS

TIME & SOURCE

TIME & SOURCE

Direct Line Telephone Conversation Between KL ACC and Singapore ACC

2207:54 UTC

[0607:54 MYT]

KL ACC Lumpur.

2207:55 UTC

[0607:55 MYT]

Four Seven.

2207:59 UTC

[0607:59 MYT]

KL ACC Hold on hold on please eer... Malaysian Two

Five Four Seven go ahead.

2208:06 UTC

[0608:06 MYT]

Singapore ACC Affirm PADLI two three zero four flight level three four

zero squawk two zero six three and next Malaysian

Three Six One.

2208:14 UTC

[0608:14 MYT]

KL ACC Eer... (xxx) (xxx) [illegible] Malaysian.

TIME &

SOURCE

AIR-GROUND COMMUNICATION

AIR-GROUND COMMUNICATION LUMPUR RADAR - FREQUENCY 132.6 MHz AND RADAR DIRECT LINE COMMUNICATION **CONTENT - OTHER FLIGHTS**

Aut Greens Commence
LUMPUR RADAR - FREQUENCY 132.6 MHz
AND RADAR DIRECT LINE COMMUNICATION
CONTENT - MAS 370

2208:17 UTC [0608:17 MYT] Three Six One. Singapore ACC 2208:18 UTC [0608:18 MYT] KL ACC Three Six One go. 2208:20 UTC [0608:20 MYT] Singapore ACC TAKSU two three two seven flight level four zero zero squawk zero zero one three. 2208:25 UTC [0608:25 MYT] **KL ACC** Zero zero one three four hundred two three six seven Three Six One and...Malaysian Two Five Four Seven PADLI two zero two three zero four and two zero six three. 2208:38UTC [0608:38 MYT] Singapore ACC Affirm Siera Bravo. 2208:39 UTC [0608:39 MYT]

Okay (xxx) (xxx) [illegible] thank you.

KL ACC

TIME &

SOURCE

SAFETY IN MH370 (9M	VESTIGATION REPORT -MRO)	
TIME & SOURCE	AIR-GROUND COMMUNICATION LUMPUR RADAR - FREQUENCY 132.6 MHz AND RADAR DIRECT LINE COMMUNICATION CONTENT - MAS 370	TIME & SOURCE
		2209:42 U [0609:42 N XAX 523
		2209:52 U [0609:52 N

AIR-GROUND COMMUNICATION LUMPUR RADAR - FREQUENCY 132.6 MHz AND RADAR DIRECT LINE COMMUNICATION **CONTENT - OTHER FLIGHTS**

2209:42 UTC [0609:42 MYT] XAX 523	Kuala Lumpur Control selamat pagi Xanadu Five two Three three four niner descending three four zero transponder three six five one.
2209:52 UTC [0609:52 MYT] Lumpur Radar	Xanadu Five Two Three Lumpur Control good morning identified Lumpur for NIPAH Three Alpha Arrival Eastan Runway Three Two Left and descend to flight level aaah one niner zero.
2210:03 UTC [0610:03 MYT] XAX 523	NIPAH Three Alpha Arrival Eastan Transition and Runway Three Two Left confirm you said flight level one nine zero sir, Xanadu Five Two Three.
2210:12 UTC [0610:12 MYT] Lumpur Radar	Five Two Three affirm descend level one niner zero direct to NIPAH.
2210:16 UTC [0610:16 MYT] XAX 523	Roger descend flight level one niner zero direct NIPAH Xanadu Five Two Three,

AIR-GROUND COMMUNICATION LUMPUR RADAR - ERECUENCY 132 6 MHz

AIR-GROUND COMMUNICATION LUMPUR RADAR - ERECUENCY 132 6 MHz

TIME & SOURCE	LUMPUR RADAR - FREQUENCY 132.6 MHz AND RADAR DIRECT LINE COMMUNICATION CONTENT - MAS 370	TIME & SOURCE	LUMPUR RADAR - FREQUENCY 132.6 MHz AND RADAR DIRECT LINE COMMUNICATION CONTENT - OTHER FLIGHTS
		2210:33 UTC [0610:33 MYT] XAX 523	Xanadu Five Two Three request high speed and aah below ten.
		2210:40 UTC [0610:40 MYT] Lumpur Radar	Five Two Three to be advised by Approach.
		2210:43 UTC [0610:43 MYT] XAX 523	Thank you Five Two Three.
		2212:41 UTC [0612:41 MYT] AXM 1034	Lumpur Radar Asian Express One Zero Three Four selamat pagi climbing flight level one eight zero passing eight thousand eight hundred.
		2212:49 UTC [0612:49 MYT] Lumpur Radar	(xxx) (xxx) [illegible] Lumpur Control good morning climb flight level two nine zero.
		2212:53 UTC [0612:53 MYT] AXM 1034	Flight level two nine zero Asian Express One Zero Three Four.

TIME & SOURCE	AIR-GROUND COMMUNICATION LUMPUR RADAR - FREQUENCY 132.6 MHz AND RADAR DIRECT LINE COMMUNICATION CONTENT - MAS 370	TIME & SOURCE	AIR-GROUND COMMUNICATION LUMPUR RADAR - FREQUENCY 132.6 MHz AND RADAR DIRECT LINE COMMUNICATION CONTENT - OTHER FLIGHTS
		2212:56 UTC [0612:56 MYT] Lumpur Radar	Zero Four and level requesting.
		2212:59 UTC [0612:59 MYT] AXM 1034	Requesting flight level Three Five Zero final Asian Express One zero Three Four.
		2213:03 UTC [0613:03 MYT] Lumpur Radar	Thanks.
			Direct Line Telephone Conversation Between KL ACC and HCM ACC
		2213:36 UTC [0613:36 MYT] HCM ACC	Helo.
		2213:37 UTC [0613:37 MYT] KL ACC	Ho Chi Minh estimate on Asian Express One Zero Three Four
		2213:41 UTC [0613:41 MYT]	Conversation interrupted by aircraft radio transmission
		HCM ACC Page 121 of 125	Standby, One Zero Three Four go ahead. Malaysia Time [MYT] - UTC + 8 hours ICAO Airline Designator for Malaysia Airlines: MAS

TIME & SOURCE	AIR-GROUND COMMUNICATION LUMPUR RADAR - FREQUENCY 132.6 MHz AND RADAR DIRECT LINE COMMUNICATION CONTENT - MAS 370	TIME & SOURCE	AIR-GROUND COMMUNICATION LUMPUR RADAR - FREQUENCY 132.6 MHz AND RADAR DIRECT LINE COMMUNICATION CONTENT - OTHER FLIGHTS
		2213:50 UTC [0613:50 MYT] KL ACC	Express One Zero Three Four estimate IGARI two two fiveeight flight level three five zero squawk two one two one.
		2214:03 UTC [0614:03 MYT] HCM ACC	Asian Express One Zero Three Four IGARI aa two two five eight level three five zero approved squawk two one two one.
		2214:11 UTC [0614:11 MYT] KL ACC	Affirm and tranfer level three five zero.
2214:13 UTC [0614:13 MYT] KL ACC	and anyway your aah SAR you activated your SA room.	AR	
2214:18 UTC [0614:18 MYT] HCM ACC	Yes standby.		
2214:26 UTC [0614:26 MYT] HCM ACC	Yap.		

AIR-GROUND COMMUNICATION LUMPUR RADAR - FREQUENCY 132.6 MHz

AIR-GROUND COMMUNICATION LUMPUR RADAR - FREQUENCY 132.6 MHz AND RADAR DIRECT LINE COMMUNICATION **CONTENT - OTHER FLIGHTS**

AND RADAR DIRECT LINE COMMUNICATION **SOURCE CONTENT - MAS 370**

TIME & SOURCE

2214:27 UTC

TIME &

[0614:27 MYT] KL ACC

Halo your you're your SAR room is act... active now.

2214:31 UTC

[0614:31 MYT]

HCM ACC Aah ... for Malaysian Three Seven Zero.

2214:33 UTC

[0614:33 MYT]

KL ACC Affirm affirm Malaysian Three Seven Zero is it activate

your your SAR your SAR search and rescue is it

activated uuh.

2214:41 UTC

[0614:41 MYT]

HCM ACC Estimated.

2214:42 UTC

[0614:42 MYT]

KL ACC Negative is it aah... you aah... you activated your SAR

room or not you open up your your..

2214:49 UTC

[0614:49 MYT]

HCM ACC I am not understand you say confirm you have any

information about it.

AIR-GROUND COMMUNICATION LUMPUR RADAR - FREQUENCY 132.6 MHz

AIR-GROUND COMMUNICATION
LUMPUR RADAR - FREQUENCY 132.6 MHz
AND RADAR DIRECT LINE COMMUNICATION
CONTENT - OTHER FLIGHTS

TIME & AND RADAR DIRECT LINE COMMUNICATION SOURCE CONTENT - MAS 370

TIME & SOURCE

2214:52 UTC [0614:52 MYT]

KL ACC Neg... negative negative we don't have any

information so at the moment we activate we activate

our SAR Room now.

2215:00 UTC

[0615:00 MYT]

HCM ACC SAR SAR Room.

2215:01 UTC

[0615:01 MYT]

KL ACC SAR Search and Rescue, Search and Rescue.

2215:05 UTC

[0615:05 MYT]

HCM ACC Ah yes you know on search and rescue

2215:07 UTC

[0615:07 MYT]

KL ACC Aaah..

2215:08 UTC

[0615:08 MYT]

HCM ACC Yeah.

AIR-GROUND COMMUNICATION LUMPUR RADAR - FREQUENCY 132.6 MHz

AIR-GROUND COMMUNICATION LUMPUR RADAR - FREQUENCY 132.6 MHz AND RADAR DIRECT LINE COMMUNICATION

CONTENT - OTHER FLIGHTS

TIME & **SOURCE**

TIME & AND RADAR DIRECT LINE COMMUNICATION **CONTENT - MAS 370**

SOURCE

2215:09 UTC [0615:09 MYT]

KL ACC Na... naa... your your search and rescue is activate

now you activated your search and rescue.

2215:12 UTC

[0615:12 MYT]

HCM ACC Ya that's right, that's right.

2215:13 UTC [0615:13 MYT]

KL ACC I see okay okay right okay.

End of Direct Line Telephone Conversation

Between KL ACC and HCM ACC

END AT 2218:00 UTC [0618:00MYT]