## **Travel Tales**

## The Search for Jim Thompson: Probabilities and Problems

## Part 3

by

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Last month we learned about Jim Thompson, the "Silk King of Thailand," who went for an afternoon walk in the high jungle of Malaysia in March 1967, and disappeared forever. This month we will explore the probability of success of the 1967 search, and the problems encountered by that search. Such a quantitative analysis has never been done before.



The bedroom at the Moonlight Bungalow where Jim Thompson slept the night before he disappeared

From an interview with a search leader, I calculated that the search segment targeted in 1967 was about 17.7 square miles, composed of 5/8 of a circle with a 3-mile radius, west, north and northeast of the "last known point," the Moonlight Bungalow. If one assumes that a 6 mile radius was more appropriate (since Jim was known to hike off trail and could have kept hiking into the moonlit evening, even while lost), then the area to be searched jumps up to 70.7 square miles, a huge area.

From interviews and secondary sources, I estimated the number of person-days of searching delivered over the course of the official 11 day search, and also over the unofficial intermittent searching that went on for months afterwards. This number was 1448, a very impressive figure.

Next, using formulae from the US National Association for Search and Rescue (NASAR), I estimated the number of square miles that were actually searched via the 1448 person-days. This estimate had a wide range, depending on assumptions used about search tactics (especially spacing of searchers) and speed over the very difficult terrain (lots of ravines, ridges, undergrowth and bamboo thickets). But a reasonable estimate was that about 11.0 square miles were actually searched in 1967, well short of the needed 17.7 square miles, and massively short of the desirable 70.7 square miles.

Then I noted that this search effort only involved a "coverage of 1.0" in NASAR terms. In other words, even in areas searched, there is not a probability of detection (POD) of 100 percent. Due to searcher fatigue, attention lapses, difficult terrain and vegetation, NASAR's formulae show that a "coverage of 1.0" only yields a POD of 63 percent, and a coverage of 2.0 (the area is searched twice) only yields a POD of 86 percent.

The "probability of area" (POA) must be considered next. This is the probability that the victim is in the searched segment, versus other possible segments, or in the "ROW" – rest of the world. For the Thompson search, I made a high and a low assumption. For the high figure, I assumed that it is 75 percent likely that the victim was inside the target 11.0 square miles. For the low figure, I assumed that it is 55 percent likely that the victim was in this search segment. This low figure is reasonable, because Jim was known to like to hike long distances, to seek out unusual plants and orchids, actually "liked to get lost" according to friends, did in fact get lost for several hours on the day before the disappearance, and could have easily wandered into nearby drainages that led well away from civilization.

The next step was to estimate the probability of success (POS) for the Thompson search, using the simple NASAR formula of POS = POD x POA. Thus POS =  $.63 \times .75 = 47$  percent (for the high assumptions); or  $.55 \times .55 = 30$  percent (low estimates). In other words, the chance that the "biggest search in Malaysian history" would have found the victim in this search is only about 30 to 47 percent, even assuming that the search segment targeted was in fact searched completely with a "coverage of 1.0." Thus there is a good chance that the search missed Thompson, and his remains are still in the jungles of the Cameron Highlands of north central Malaysia.

Furthermore, there were weaknesses and problems in the search execution that reduced the chances that it would be successful. NASAR has identified nine classic errors in searches that are common; for the Thompson search I found several that were certain or very likely. These were: the agency nominally in charge (the Malaysian Army and Police) was unprepared for the massive size and scope of the incident; it was not always clear who was in charge; ineffective

search tactics were apparently used (Thompson was known to hike off-trail, but the main tactic used was to search only within 200 yards of any known trail); and search managers sometimes lost control of the effort. This latter problem occurred when a well-known psychic, Peter Hurkos, was brought in and was allowed to help direct parts of the investigation – a very serious error which would never be allowed in a professional search today.



The only picture of the search for Jim Thompson shows the difficult terrain and thick undergrowth

My own research into disaster and emergency management has shown that as the size and complexity of the response increases, the likelihood of serious problems in incident communications and management increases by more than the square of the inputs. In other words, since this search was the "biggest in Malaysian history," and involved numerous agencies, groups, individuals, national origins and even multiple languages, it is almost a mathematical certainty that this was not the "best" search in Malaysian history.

By the way, the types of probability and mathematical analysis used here are exactly the kind that are being used in the recent Malaysian Airlines flight 370 disappearance in the Indian Ocean.

Next month we will discuss the possible causes of the Thompson disappearance, and the possible eye-witnesses who saw Jim after he left his comfortable vacation cottage in the jungle.

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Lew Toulmin lives in Silver Spring, Maryland and Fairhope. His massive report on the Jim Thompson disappearance, including hundreds of pages of primary source documents and

interviews with persons never before contacted, can be downloaded for free from his website at: <u>http://www.themosttraveled.com/new/new\_land.html</u>.

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