



(U) Al-Zawahiri Speaks Yet Again!

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(S) Al-Qa'ida's second-in-command produced a video that was broadcast on television this week. What does an analysis of his voice and appearance tell us? What else can we learn from the tape?

(S) On 30 January 2006, Al-Qa'ida's number two leader Ayman Al-Zawahiri proved to the world -- courtesy of the Arab Al-Jazeera broadcaster -- that the attempted targeting earlier in the month had failed to silence him. Although obvious from the video that the pediatrician-turned-terrorist was indeed alive and functional, mathematical voice matching produced a perfect score of 99% upon comparison with previous soundfiles on this speaker from the same source.

(S) As an orator, Al-Zawahiri usually takes about two minutes to "warm up" in longer messages, displaying initially a fair amount of tonal diversity. During the 30 Jan message -- lasting about three minutes -- the terrorist never quite settled down, probably rattled by the attempt on his life and the vehement content. By contrast, Bin Laden has shown remarkable voice control over several minutes, the mark of a well-versed communicator.

(S) It is visually apparent that Al-Zawahiri underwent a medical procedure last year to alleviate a possible aneurysm in his forehead after the message taped for release on 17 June 05. Indeed, digital analysis of the 01 September 05 message -- most likely taped after the procedure -- suggests a different recording device. Al-Zawahiri may have traveled for the procedure, waited to heal, and then recorded a message released on 01 September 05 out of a need to show the world -- then as now -- that all is well. See the image quadrangle below.



(U) Al-Zawahiri, as seen in four broadcasts (Al-Jazeera)

(S) There has been a growing concern in the Intelligence Community that messages relayed through Al-Jazeera by various Al-Qa'ida personalities contained codewords or hidden meanings intended to somehow issue orders to their followers. No such evidence has been uncovered up to now, but the 30 January 06 message does contain something unusual. For the first time, the background used in taping appears totally black, giving the impression of a studio recording. However, closer digital analysis revealed some structure; the side-by-side composite below displays a color original snapshot (left), and its equalized version (right). Equalization redistributes brightness values to more evenly represent an image.



(S) Original and equalized snapshots of Al-Zawahiri's 30 January appearance. (Al-Jazeera)

(S) Note the background does display some unsuspected patterns in the equalized image, perhaps even a rectangular banner at top, but without sufficient detail to discern characters. What could have happened here? It is possible that the tape delivered to Al-Jazeera contained inflammatory evidence in the background, but out of a concern for being accused of aiding and abetting Al-Qa'ida, the Arab broadcaster digitally blacked out the detail? The Intelligence Community will no doubt analyze this tape further for any available clues or information.

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(S) See also a previous article, ["Technology that Identifies People by the Sound of Their Voices"](#)

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