MEMORANDUM FOR

Director, National Reconnaissance Office

SUBJECT: EOI Requirements

Attached is a memorandum to the Chairman of USIB regarding EOI requirements. I think this view should affect our discussions of the EOI system at the forthcoming ExCom meeting.

Edward E. David, Jr.
Science Adviser

Attachment
BYE 11933-71

BYE 11934-71
MEMORANDUM FOR

Chairman, United States Intelligence Board

SUBJECT: Near Real Time Photographic System Requirements

I am aware from our NRP Executive Committee responsibilities that elements of the USIB have been re-evaluating requirements for the prospective NRT system. I thought it might be useful in the Board’s future efforts at sharpening NRT system requirements to communicate to you the perception of these requirements by the primary users of the image product.

With respect to the return time of images, the controlling need is for frequent, regular coverage; availability of images from 24 to 48 hours after levying requirements is quite acceptable. For example, a system with two accesses per day and a nominal return time for images of 36 hours would suffice. Experience with such a surveillance system would provide guidance for future requirements.

With respect to ground resolution distance, the ability to estimate tactical order-of-battle is felt to be the controlling need, in which case a ground resolution distance of 2-3 feet appears necessary. There are, no doubt, extreme situations in which ground resolution distances much smaller than this would be necessary, but these extremes should not be attained at costs severely impacting other NRP system needs.

With respect to the area requirement of an NRT system, the USIB addition of a substantial area capability to the requirements is deemed an important factor. Moreover, it is likely that the currently proposed value (4,000 square miles, contiguous) is a lower bound to what further experience and analysis would eventually indicate as necessary.
To summarize, then, the primary users' view of NRT systems needs is that (1) frequent, regular coverage is paramount, and that a nominal 36-hour cycle from levying requirements to availability of images is acceptable; (2) ground resolution distance in the 2-3 foot range is necessary; and (3) an area coverage of at least 4,000 square miles per locality is mandatory and preferably should be larger than this.

Edward E. David, Jr.
Science Adviser

Cy to
Deputy Secretary of Defense
Director NRO