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Minimum Technical Specifications
concerning Surveillance

1. Type of photography required:

a. Area search (broad look). Coverage of broad areas with ground resolution of resulting photography adequate for recognition of changes and activities which could indicate possible offensive weapon installations, deployment, or activity.

b. Specific coverage (close look). Coverage of specific areas with ground resolution of resulting photography adequate to give technical details of objects photographed.

2. Equipment required for each aircraft:

a. Area search (broad look). Each aircraft shall contain four cameras: a prime vertical, a left oblique, a right oblique, and a mapping camera.

b. Specific coverage (close look). Each aircraft shall contain three cameras: a prime vertical, and left and right oblique cameras.

3. Camera requirements:

a. Area search (broad look).

(1) Prime vertical.

(a) Area covered in each photograph shall be not less than one mile square.

(b) Ground resolution of resulting photography shall be sufficient to identify objects of two feet on a side, and to measure such objects with an error of not more than ten percent.

(2) Left and right oblique.

(a) The oblique cameras shall be capable of photography equivalent to that of the prime vertical out to a minimum angle of forty-five degrees from the nadir of the prime vertical camera.

(b) The photography from the oblique cameras shall overlap the prime vertical photography by at least one degree.

(c) No photography beyond forty-five degrees from the nadir of the prime vertical camera shall be considered in meeting any requirements for area coverage.

(3) Mapping camera.

(a) Field of view shall be not less than 70^{o} nor more than 90^{o}.

(b) Focal length shall be between five and nine inches, inclusive.

(c) Overlap shall be at least 55% in the line of flight.

(4) All area search camera installations shall operate continuously, and the prime vertical and oblique cameras shall operate simultaneously over area to be photographed.

b. Specific coverage (close look).

(1) Prime vertical.

(a) Minimum width of ground area covered in a single frame shall be not less than one half of the operating altitude of the aircraft.

(b) Ground resolution of resulting photography shall be sufficient to identify objects of three inches on a side.

(2) Left and right oblique.

(a) The oblique cameras shall be capable of photography equivalent to that of the prime vertical camera.

(b) Photography of the oblique cameras shall overlap the prime vertical photography and shall extend to the horizon.

(3) All specific coverage camera installations shall operate simultaneously and continuously in the areas to be photographed.

4. Processing requirements.

a. The processing facility shall be capable of high quality processing and titling all frames of original negatives, and producing duplicate positives and negatives of all film.

b. The film processing area shall be relatively dust free and shall be temperature controlled to 70°F. (plus 10°F or minus 5°F) and relative humidity of 55% ($\pm$ 5%) while operating at maximum capacity.

c. The facility shall utilize continuous processing machines having a minimum capability of processing, fixing, washing and drying film 9 1/2 inches wide at a minimum rate of 8 feet per minute on a continuous basis.

d. Printing equipment shall be capable of printing duplicate positives and negatives at a minimum rate of 10 feet per minute while retaining at least 90% of the resolution existing in the original negative.

e. Processing shall include titling of all original negatives prior to printing duplicate positives and negatives, to include mission number, date flown, aircraft number, and camera position. Each negative shall be numbered sequentially from beginning to end of each roll. A mission plot indicating the area covered by the roll of film shall be attached to the beginning of each roll of film. Leaders and trailers shall be attached to each roll of film for protection in handling and shipping.

EXAMPLES OF TYPES OF CAMERAS TO BE USED

FOR AREA SEARCH

Vertical and oblique camera positions

24 or 36 inch lenses in either K-38, KA-1, KA-2 cameras or equal

Mapping cameras

6 inch lens in either KC-1B or RC-9 (Wild) camera or equal

EXAMPLES OF TYPES OF CAMERAS TO BE USED

FOR SPECIFIC COVERAGE

Vertical and oblique camera positions

6 or 12 inch lenses in either K-45, K-46 (Chicago Aerial Industries) KA-1, KA-2, or equal

Right and left oblique only

3 or 6 inch lenses in either KB-10 (J.A. Mauer), Vinten camera or equal,