

# GRAPHIC TRAINING AID 05-02-016

Headquarters, Department of the Army JULY 1987

## HOW TO HOLD/DROP COLORS USING THE FILMS/FILTERS

| To Photograph            | On pan film--                          | On ortho film--                           | On blue sensitive --  |
|--------------------------|--|---|-----------------------|
| Blue as black.....       | Red A (25).....<br>Orange G (15)..     | Yellow K-2 (8)<br>Orange G (15)..         | (Use ortho film)      |
| Blue as white.....       | Blue (44) .....                        | Blue (44) .....                           | None or blue          |
| Blue-green as black...   | Red A (25).....                        | (Use pan film) ...                        | (Use pan film)        |
| Blue-green as white...   | Blue C-5 (47) ...                      | Blue C-5 (47) ...                         | (Use ortho film)      |
| Green as black.....      | Red A (25).....                        | (Use pan film) ...                        | (Use pan film)        |
| Green as white.....      | Green B (58) .....                     | Green B (58) .....                        | (Use ortho film)      |
|                          |  | Yellow K-2 (8) ...                        |                       |
| Orange as black.....     | Blue C-5 (47) ...                      | Blue C-5 (47) ...                         | None                  |
| Orange as white.....     | Red A (25).....<br>Orange G (15).. ... | (Use pan film) ...                        | (Use pan film)        |
| Red as black.....        | Green B (58) .....                     | Green B (58) .....                        | None                  |
| Red as white.....        | Red A (25).....<br>Orange G (15).. ... | (Use pan film) ...                        | (Use pan film)        |
| Violet as black.....     | Green B (58) .....                     | Orange G (15).. ...                       | (Use ortho film)      |
| Violet as white.....     | Blue C-5 (47) ...                      | Blue C-5 (47) ...                         | None or blue C-5 (47) |
| Yellow as black.....     | Blue C-5 (47) ...                      | Blue C-5 (47) ...                         | None or blue C-5 (47) |
| Yellow as white.....     | Red A (25).....<br>Orange G (15)..     | Yellow K-2 (8) ...<br>Orange G (15).. ... | (Use ortho film)      |
| Yellow-green as black... | Blue C-5 (47) ...                      | Blue C-5 (47) ...                         | None or blue C-5 (47) |
| Yellow-green as white... | Green B (58) .....                     | Green B (58) .....                        |                       |
|                          |  | Yellow K-2 (8) ...                        |                       |

### NOTE:

**Pan film can be used to hold/drop colors using prescribed filter.**

**To determine filter factor see film data sheet.**

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Support Centers (TASC)

## ***Exposure Indexes for Angles of Lighting.***

| <i>Angle of lighting</i> | <i>Multiplying Index</i> |
|--------------------------|--------------------------|
| 10°                      | 4                        |
| 15°                      | 2.7                      |
| 20°                      | 2                        |
| 25°                      | 1 ⅔                      |
| 30°                      | 1.4                      |
| 35°                      | 1.2                      |
| 40°                      | 1.1                      |
| 50°                      | .9                       |
| 55°                      | .86                      |
| 60°                      | .82                      |
| 65°                      | .78                      |

### ***Hints When Dropping or Holding Colors.***

(1) To DROP a color use a filter of the same color. If possible use one that is of the same color but darker.

(2) Overexposure helps to DROP out a color, with or without a filter.

(3) Increasing the light angle helps to DROP colors.

(4) If possible, *mask out* unwanted color, such as stains or notations written in colored pencil in the border area. Do not waste time trying to eliminate something through the use of filter which could be eliminated simply by covering it with a piece of white paper.

(5) To HOLD a color use filter that is complementary to that color.

(6) Underexposure helps to HOLD a color, with or without a filter.

(7) Decreasing the light angle helps to HOLD colors.