



**FINANCIAL IMPACT**

The comparison of financial impact of high-speed photography vs. high-speed digital imaging is presented in the table below. The comparison is based on 1 year operation for 1 plane with 18 cameras, 2 flights a day over 7 days a week. In addition, an error rate of 1 in 50 test is assumed for a misfire failed capture (premature camera starts, failed launch, etc.). In support of the test, assume 120 ground personnel @ an average rate of \$25/hr. The greatest cost saving from digital imaging is the elimination of the recurring expense of film & film processing. In addition, the opportunity to rerun a test by resetting the HG 100k camera while in the air is very important and cost effective. There have been many occasions where the film was expended on a test that still had the safety set on the weapon. The digital cameras in less than 1.5 years will be zero cost averaged when compared to film.

| <b>FILM Solution</b>  | <b>COST</b>                                 | <b>DIGITAL Solution</b>                                  | <b>COST</b>           |
|---|---|--|-----------------------|
| (18) 1PL cameras  | \$115,740                                   | (18) HG 100k cameras* <sup>1</sup>                       | \$1,620,000           |
| (18) 200 ft film Mag's  | \$93,240                                    | -----  | \$0                   |
| (18) Adapter Cables   | \$4500                                      | (18) Adapter Cables <sup>2</sup>                         | \$3600                |
| (18) IRIG Timing Interface  | \$83,160                                    | (1) IRIG B Generator                                     | \$5000 * <sup>4</sup> |
| (18) BCD Numeric Data   | \$36,900                                    | (18) BCD Numeric Data                                    | \$0                   |
| (18) Variable Shutter Option  | \$8730                                      | (18) Variable Shutter Option                             | \$0                   |
| (13,140) 200 ft. rolls of HS film,<br>EASTMAN EKTACHROME High Speed Film 7250<br>including processing | \$722,700<br>[\$55/roll (avg. \$42 - \$76)] |  |                       |
| (1) film reader & analyzer  | \$200,000                                   | (1) Image Workstation                                    | \$46,000              |
| (1) year service for 12 cameras* <sup>3</sup>   | \$7200                                      | (1) year of service for 18 Imagers                       | \$0                   |
| (8) Misfires including ground support cost  | \$96,000                                    | (4) Misfires including ground support cost* <sup>5</sup> | \$0                   |
| <b>TOTAL</b>  | <b>\$1,368,170</b>                          |  | <b>\$1,674,600</b>    |

\*1 HG 100k camera ~ \$90,000.  
 \*2 Custom cables using Main connector to 1PL connector.  
 \*3 Four hr service (lube and repair) @ \$25/hr each camera every 3 months.  
 \*4 IRIG B Time Code Generator VME card, Single board VME PC, and card cage.  
 \*5 Assumes ordnance is not expended. HG 100k cameras can be reset without landing for a 2<sup>nd</sup> try.