18 January 1956

MEMORANDUM FOR: C/TSS/APD

THROUGH: AC/TSS/TA

SUBJECT: 40 Inch Telescoping Telephoto Lens for Use with 35 mm Cameras

1. The Photographic Division has evaluated subject lens to a limited extent due to time considerations and turned it over to the requesting party for their test, evaluation and training. In our opinion, the unit functioned very well and the party who received it appeared to be very happy with its performance.

2. In using the first model, we discovered that a few changes might make the unit more useful and we should like to have TSS/APD consider them for incorporation in the lenses to follow.

   A. Some means of critical focusing. As it now stands, the final tube must be moved in and out and finally tightened at the point of focus. This is not particularly good since the tightening operation frequently throws the focus out.

   B. The insertion of a stop, or guard, to protect the iris more positively so that when the lens is collapsed, the iris will not be damaged.

   C. Wider surface where the tripod socket is located for greater security of the lens when mounted. A 2½ inch surface should provide greater stability.

   D. To incorporate some means of access to the rear element of the lens so that it can be cleaned.

   E. Knurl a ½ inch section of the extension tubes so that they will not slip when handled by an operator who might be wearing gloves or using the lens in damp weather.

   F. Install stops so the threads on the extension tubes cannot inadvertently be tightened to the freezing point.

   G. Provide interchangeable camera mount fittings so that the Leica with reflex housing or the Exakta can be used.
3. We request that the second lens, of the three we requested 28 June 1955 be equal to the one we received on the first model in respect to focal length, maximum aperture, and resolution. We hope that you will find it possible to deliver this second lens by 1 April 1956.

Chief, TSS/Photographic Division

Distribution:
2 - C/TSS/APD
1 - TSS/SRB
1 - PD/Files
TSS/TA/PD/