Schematic drawing in 20 the formation process of jets, as suggested by Sterling et al. (2015). The dark blue feature is a cool minifilament material enveloped by a sheared magnetic field. Red/black line show field that has not undergone magnetic reconstructions, and "F" shows recompression locations. The blue net vectors (a)–(j) show the jet bright point (JBP), formed by internal reconnections between the erupting minifilaments. Such JBP are common features of observed jets, appearing off to one side of the base of jets (spines). In (e) external (plan interchange) reconnection has made a new open field line, where the hot X-ray and red light jet form. In (j) the external reconnection has entered the outer minifilament field so that the cool material enters the open field, forming a cool (e.g., 168 Å) jet.

Main Points and Conclusions:

• Several of our active region jets, including Table 1 events 4 and 10, and the relatively-weak jet of Figs. 7 and 8, result from eruptions of miniature filaments, as found in the Figs. 1 schematic. That is, the minifilaments (or jets) are behaving like the polar coronal hole jets (PCHJ) from 1996, and thus they are still being driven by magnetic reconnection at the photosphere, rather than by slow magnetic-reconnection at the coronal base. We speculate that the minifilaments existed, but were either "eaten away" by external reconnection or by the jets. Further study of such strong jets (i.e., where the jet spines show relatively strong emission in hot-EUV channels and in X-rays), and the JBP corresponds to a miniature flare. For several other strong jets occurring around the red and green arrows of Fig. 2f, however, we could not confirm whether the jets originated from minifilaments. Although their subsequent evolution was consistent with a minifilament origin, the minifilaments were not clearly discerned during this time.

• These minifilaments erupt from magnetic neutral lines (blue and brown arrows of Fig. 2f, for the jet events discussed here), and the JBP corresponds to a miniature flare. For several other strong jets occurring around the red and green arrows of Fig. 2f, however, we could not confirm whether the jets originated from minifilaments. Although their subsequent evolution was consistent with a minifilament origin, the minifilaments were not clearly discerned during this time.

• Several of our active region jets, including Table 1 events 4 and 10, and the relatively-weak jet of Figs. 7 and 8, result from eruptions of miniature filaments, as found in the Figs. 1 schematic. That is, the minifilaments (or jets) are behaving like the polar coronal hole jets (PCHJ) from 1996, and thus they are still being driven by magnetic reconnection at the photosphere, rather than by slow magnetic-reconnection at the coronal base. We speculate that the minifilaments existed, but were either "eaten away" by external reconnection or by the jets. Further study of such strong jets (i.e., where the jet spines show relatively strong emission in hot-EUV channels and in X-rays), and the JBP corresponds to a miniature flare. For several other strong jets occurring around the red and green arrows of Fig. 2f, however, we could not confirm whether the jets originated from minifilaments. Although their subsequent evolution was consistent with a minifilament origin, the minifilaments were not clearly discerned during this time.

• These minifilaments erupt from magnetic neutral lines (blue and brown arrows of Fig. 2f, for the jet events discussed here), and the JBP corresponds to a miniature flare. For several other strong jets occurring around the red and green arrows of Fig. 2f, however, we could not confirm whether the jets originated from minifilaments. Although their subsequent evolution was consistent with a minifilament origin, the minifilaments were not clearly discerned during this time.