Refer to the argument on P736, i.e. the n-planes in F through p are exactly the $n-$planes spanned by p together with $(n-1)-$planes in $\tilde{F}$.

Thus $\overline{pq}$ must pass through x_i, which is impossible since $x_i \in \overline{pq} \subset U_i$. ($x_i \notin U_i$). $\Rightarrow$ We see that $F \cap U_i$ is smooth, and $T_{x_i}(Q) \cap Q$ is the cone through x_i over C_i.

Λ must therefore intersect U_i, $i = 1$ or 2, in one of the two tangent lines L_{i_1}, L_{i_2} to C_i through p; i.e., Λ must be one of the four 2-planes Λ_{ij} spanned by L_i and L_{ij}.

If $\Lambda \cap F$ is a line $\Rightarrow$ $\Lambda \cap Q = \Lambda \cap F \cap V_4 = \Lambda \cap F$ is a line since $\Lambda \subset V_4$. $\Rightarrow$ $\Lambda \cap Q \subset T_{x_i}(Q)$ $\Rightarrow$ $\Lambda \cap Q \subset \Lambda \cap T_{x_i}(Q) \cap Q$ $\Rightarrow$ $\exists$ a point $q \in C_i$ s.t $q \in \Lambda$. $\Rightarrow$ $\overline{pq} \subset \Lambda$ since Λ is a plane

$\Lambda \cap U_i$ is a line since, if $\Lambda = U_i$, then $F \cap \Lambda = F \cap U_i \Rightarrow$ double line $=$ smooth conic ($\Rightarrow \Lambda \cap U_i = \overline{pq}$). $\Rightarrow$

If $\overline{pq} \cap C_i = \{q_1, q_2\}$, $q_1 \neq q_2$, then $\Lambda \cap C_i = \{q_1, q_2\}$. $\Rightarrow$ $\Lambda \cap F \cap U_i = \{q_1, q_2\} \doteq l \cap U_i$ ~~wh~~ which is a one-point set $\Rightarrow$ contradiction.