$\Rightarrow \tilde{\Phi}(l_{x_3}) = x_3 \subset \tilde{\Phi}(\sigma_{2,1}(p, h_{12})) = \overline{x_1, x_2} \Rightarrow x_i$'s lie on a line i.e. they are collinear $\Rightarrow$ Contradiction. $\Rightarrow$ l_{x_i}'s are not coplanar.
$\Rightarrow$ a line l meets all l_{x_i}'s $\Leftrightarrow$ it passes the point p, (otherwise if l meets all l_{x_i}'s, then $\langle p, l \rangle = \mathbb{P}^2 = \overline{l_{x_i}\text{'s}}$) ⌟

In the first case, V_2 is contained in — hence equal to — the Schubert cycle $\sigma_{1,1}(h)$ of lines lying in h; in the second case V_2 is contained in, and so equal to, the Schubert cycle $\sigma_2(p)$ of lines through p.

⌜ $V_2 \overset{?}{\subset} \tilde{\Phi}(\sigma_{1,1}(h))$.
$\forall x \in V_2 \Rightarrow l_x \cap l_{x_i} \neq \phi$ for all i since $V_2 \subset G \bigcap_{i=1}^{3} T_{x_i}$ by the argument above $\Rightarrow$ By 1 above, $l_x \subset h = \overline{P_{12}, P_{13}, P_{23}} \Rightarrow l_x \in \sigma_{1,1}(h) \Rightarrow \tilde{\Phi}(l_x) = x \in \tilde{\Phi}(\sigma_{1,1}(h))$. $\Rightarrow V_2 \subset \tilde{\Phi}(\sigma_{1,1}(h))$. $\Rightarrow$ Since $\dim \tilde{\Phi}(\sigma_{1,1}(h)) = 2$ by the result on P756 ($\sigma_{1,1}(h) = \mathbb{P}^2$), $V_2 = \tilde{\Phi}(\sigma_{1,1}(h))$.
$V_2 \overset{?}{\subset} \tilde{\Phi}(\sigma_2(p))$
$\forall x \in V_2 \Rightarrow$ Again $l_x \cap l_{x_i} \neq \phi$ for all i. $\Rightarrow l_x \ni p$
$\Rightarrow l_x \in \sigma_2(p) \Rightarrow x \in \tilde{\Phi}(\sigma_2(p)) \Rightarrow V_2 \subset \tilde{\Phi}(\sigma_2(p))$
$\Rightarrow$ Again $V_2 = \tilde{\Phi}(\sigma_2(p))$. ⌟

We will henceforth write the Schubert cycles on G simply as $\sigma(p)$, $\sigma(h)$, $\sigma(l)$, and $\sigma(p, h)$. In