$$\begin{pmatrix} a_1 & b_1 & c_1 & * & \cdots \\ a_3 & b_3 & c_3 & & \\ a_5 & b_5 & c_5 & & \\ \vdots & & & & \end{pmatrix}$$ has rank $n-l$ and $(p-l)\times(q-l)$ matrix.

To mak M rank $n+k$, we have only to make N rank $n+k-l$, which is easy.
Note that when we change vectors slightly, e^i's are not involved($\because \begin{pmatrix} 0\\ \vdots \\ 1 \\ \vdots \\ 0 \end{pmatrix}$ type.)

$$\begin{array}{l} v_1 = (* \ * \cdots\cdots \ * \ \overset{\overset{n-k+1-a_1}{\downarrow}}{1}, 0 \cdots 0 \ 0 \\ v_2 = (* \ * \cdots\cdots \ * \ 0 \ * \cdots \underset{\underset{n-k+2-a_2}{\uparrow}}{1}, 0 \cdots 0 \\ v_3 = (* \ * \cdots \ * \ 0 \ * \cdots 0 \ * \cdots \underset{\underset{n-k+3-a_3}{\uparrow}}{1}, 0 \cdots \end{array}$$

Conversely, any matrix of this form describes a k-plane $\Lambda \in W_{a_1 \cdots a_k}$. ☞ O.K.
Since $(k^2 + \sum a_i)$ entries are specified in the diagram and the rest are completely free to vary, we have homeomorphisms

$$W_{a_1, a_2, \cdots a_k} \cong \mathbb{C}^{k(n-k)-\sum a_i};$$

consequently, the sets $W_{a_1 \cdots a_k}$ give a cell decomposition of $G(k,n)$.

☞ For v_1, $n-(n-k+1-a_1)+1$ entries
for v_2, $n-(n-k+2-a_2)+1+1$ entries
for v_3, $n-(n-k+3-a_3)+1+2$ 〃