Lompoc City Council Agenda Item

City Council Meeting Date: August 2, 2005

TO: Gary P. Keefe, City Administrator

FROM: Linual White, Fire Chief

SUBJECT: Council Request for Information Regarding Safety Standards

For Airplane Hangers at the City Airport

RECOMMENDATION:

That the City Council consider this report, receive public comment, and direct staff to perform one of the following options:

- 1. Maintain the fire safety standards contained in Lompoc City Code Section 1604, Automatic Sprinkler and Alarm Systems; or
- 2. Prepare a text amendment to Lompoc City Code Section 1604 for Council consideration of recision of the current standards requiring 4-hour-fire-resistive area separation walls; or
- 3. Provide other appropriate direction to staff.

DISCUSSION:

During the regular meeting of the Lompoc City Council held on June 21, 2005, Mayor DeWees requested staff to "provide a report for Council's review pertaining to fire suppression standards at the Airport Hangers." Staff understands that this request is in direct response to Mr. Mark Hudgens's belief that fire suppression standards and requirements applied to his proposed airport hanger project exceed what is necessary to provide adequate fire protection.

BACKGROUND INFORMATION:

On June 9, 1980, the Lompoc Fire Department was rated by the Insurance Service Office (ISO) which assessed a 2,371 point deficiency rating. Poor ratings cause higher fire insurance premiums across the entire City, but particularly for commercial properties. The categories under review were Staffing, Water Supply, Equipment, Communications, and Fire Prevention. The category relevant to this report is the development and implementation of modern fire prevention codes, including an automatic fire sprinkler ordinance.



In 1983, to improve ISO ratings and obtain the resulting lower fire insurance premiums, the City Council enacted Lompoc City Code Section 1604, Automatic Sprinkler and Alarm Systems. Pertinent portions of the Ordinance state that fire extinguishing systems, alarms, and smoke detection systems, shall be required, installed, and maintained according to the most recently adopted California Building Code; in addition, Council specified the following mandatory requirements (emphasis added):

"Fire Sprinklers – New Construction for Non-Residential Occupancies, "Automatic Sprinkler Systems shall be installed and maintained in all new buildings which have a total floor area exceeding 5,000 square feet, subject to the following exceptions and limitations:

- a. Office Buildings. All new office buildings with a total floor area exceeding 10,000 square feet shall be provided with an automatic sprinkler system.
- b. Additions to Existing Buildings. Except for office buildings classified as Group B-2, if the total floor area of the building including the addition is in excess of 5,000 square feet the entire building (existing and the addition) shall be provided with an automatic sprinkler system.
- c. Where the building is classified by the Building Official as an office building, if the total floor area of the building including the addition exceeds 10,000 square feet, the entire building (existing and the addition) shall be provided with an automatic fire sprinkler system.
- d. Area Separation Walls. Each portion of a building separated by one or more area separation walls with not less than four-hour-fire-resistive construction as defined within the most recently adopted California Building Code may be considered a separate building. The extent and location of such area separation walls shall provide a complete separation."

In reviewing the history of the sprinkler ordinance, over the last twenty-two years numerous projects have complied with this standard. Consequently, the City's safety record for life and property at the Airport has been excellent. The Airport currently has thirty-six buildings, of which thirty-five are in compliance with the Ordinance. The one exception is the main hanger, which is 7,500 (+/-) square feet, which was built in 1961-62 and therefore not subject to the 1983 ordinance. The Santa Barbara County requirement is for sprinklers at 5,000 sq. ft., but is expected to be revised upward.

Developers who submit projects to the City at large and specifically at the Airport already are given options which enable them to decide which system will work best for their project. Examples of the options are as follows:

1. Provide an automatic fire sprinkler system in all buildings in excess of 5,000 square feet.

- 2. Cluster the hangers in sizes less than 5,000 square feet.
- 3. Provide separation of the building into areas of less than 5,000 square feet by constructing a four-hour fire wall.

IMPACT OF OPTIONS:

OPTION 1

Developers will continue to build under the safety standards that have been in place since 1983. The three options discussed above in this report will continue to be offered as alternatives to developers.

OPTION 2

This option will enact the following conditions as they pertain to buildings requiring automatic fire sprinklers.

California Building Code Section 504.6 states that: "area separation walls shall not be considered to create separate buildings for the purpose of automatic fire sprinkler system requirements as set forth in Chapter 9. The exception to this requirement is that the building square footage may be reduced by area separation if the wall is rated as four-hour-fire-resistive construction.

When an area separation also separates occupancies that are required to be separated by an occupancy separation, the most restrictive requirements of each separation shall apply.

504.62 Fire resistance and openings. Area separation walls shall not be less than four-hour-fire-resistive construction in Types I, II-FR, III, and IV buildings and two-hour-fire-resistive construction in Type II one-hour, Type II-N or Type V buildings."

Higher insurance premiums should be expected if this option is chosen.

FACTORS BEARING ON THE ISSUE:

The League of California Cities has recently formally supported the adoption of the International Code Council (ICC) Codes, which, if adopted, will require cities to enforce NFPA 409, which is more restrictive than the City's current ordinance. Under NFPA 409 Section 412.2.6, "Fire Suppression," aircraft hangers must be provided with fire suppression systems of water and foam regardless of the square footage. Under the new code, compartmentation provisions (fire walls) have been deleted and replaced with fire sprinkler requirements. It is anticipated that the code will be published and ready for adoption by 2006.

A survey was conducted to compare the City's standards with the ordinances of other jurisdictions; the results are as follows:

AGENCY	ORD	SQ FT	SEPARATION
Santa Barbara City Fire*	YES	5,000	NO
Santa Maria Fire	YES	7,500	YES (Code)
Montecito Fire	YES	3,500	NO
Santa Barbara Co. Fire**	YES	5,000	YES (4-hr)
Lompoc Fire*	YES	5,000	YES (4-hr)
Carp/Summerland	YES	3,500	NO
Oxnard City Fire*	YES	500	NO

^{*}Agencies with airports/hangers within their jurisdictions

Oxnard City Fire Department provides fire protection to the Oxnard Airport and, in the early 1990's, they experienced a devastating fire at their airport, resulting in substantial property loss. Due to the aviation fuel and other fluids associated with aircraft, the fire suppression force and the water supply were inadequate to extinguish and control the fire. As a direct result of that incident and other issues, the City of Oxnard adopted an automatic fire sprinkler ordinance which has developed into a 500-square-foot standard with no exceptions.

CONCLUSION:

The safety of life and property remains the highest priority of the Lompoc Fire Department. Based on the research conducted for this report, the historical record of fire safety at the Lompoc Airport, the financial benefit of lower fire insurance premiums, and the apparent trend toward stricter fire safety standards, staff recommends that Council retain the existing safety standards of LCC Section 1604.

This recommendation arises from the following facts:

- The City of Lompoc has been consistent in the administration of this ordinance at the Airport and throughout the City.
- The City standard is consistent with other jurisdictions within the County and is considered a moderate program by comparison
- Current Building and Fire Codes already offer alternatives to developers.
- Pending adoption of the International Code Council (ICC) Code will affect future airplane hanger projects by requiring automatic fire sprinklers and foam systems, regardless of size and separation.

^{**}Santa Barbara County Fire is currently responding to a builder's challenge to their ordinance for residential development (not commercial). It is unknown what the outcome of that challenge will be.

I look forward to your direction and continued support in the interest of the safety of the citizens of Lompoc.
Linual White, Fire Chief
APPROVED FOR SUBMITTAL TO CITY COUNCIL:
Gary Keefe, City Administrator