

4. Experience has demonstrated that there is also a definite need for certain personnel attached to the Chairman's staff to live in the same vicinity with him in order to facilitate the volume of official business that is transacted outside of normal working hours, during weekends, and on holidays.

Senator CHAVEZ. Thank you, Admiral.

Admiral RADFORD. Thank you, sir.

Senator CHAVEZ. We will now hear from Mr. Wright.

AIR FORCE ACADEMY

STATEMENT OF FRANK LLOYD WRIGHT, ARCHITECT, MADISON, WIS.

GENERAL STATEMENT

Mr. WRIGHT. I am not here to ask for the appropriation of anything except a little uncommon commonsense regarding the culture of this Nation. I consider the action of your subcommittee recently on appropriations to be one of the most encouraging things and a salvation clause in the history of architecture since I have been practicing it for 60 years.

It seems that the ways and means of communicating these commissions concerning things that characterize the appearance of the Nation and the architecture of the Nation for 300 years is somewhat remiss, commercialized, and in the hands of a small clique and drifting more and more toward commercialism. The planned factory, the institution, with 500 or 600 draftsmen instead of the inspired individual.

I suppose the whole country is drifting toward equalitarianism quite rapidly but it is a pity to see it enter into architecture which is an inspired region and should be.

AIR FORCE ACADEMY PLANS

If we do not know a little better than we seem to in this Air Force Academy plan, I cannot say anything more for architecture along the line of modern architecture which I represent.

I refused to enter this competition for reasons I have stated and the statement I handed to the committee. I do not think I shall bother you with it.

I have written certain things concerning the project as it stands, which are also readable, and I do not want to bother you with those.

All I ask is that some real consideration be given by Congress, by our Government, to these things that usually go by default. I regard this thing as it now stands as something that went by the usual default, expediency for the expedient. It has no virtue.

Senator CHAVEZ. As a professional man of 60 years' experience, you would like to have plans that would meet the atmosphere and the elements and the locale, while you may not do it.

Mr. WRIGHT. Certainly; and some inspiration, something of the spirit and not be wholly a concession to the expediency of the time. Now, how to get it? I have outlined a little plan that takes it by democratic process to the young people of this Nation, those unspoiled by the average conditioning which they receive concerning the arts. That plan I have also given to the committee and I will not waste your time now. But it seems to me an encouraging thing when our Con-

gress will take a vital interest in the character of the thing that is going to characterize us for the next 300 years.

Senator CHAVEZ. I want to do it. I want to keep every section of the country intact; even the esthetic end of it. I know a building that would fit Philadelphia would not fit Colorado Springs.

Mr. WRIGHT. That is true.

Senator CHAVEZ. I know the one that would fit Colorado Springs probably would not suit Seattle, Wash., or Boston.

Mr. WRIGHT. That is a very admirable statement.

Senator CHAVEZ. We just happen to have a particular atmosphere, some altitude, some mountains, some blue skies, and this and that. If I understand you correctly, you want whoever draws the plans to have those things in mind.

Mr. WRIGHT. I went to the city, was inspired by it, and thought it would be a shame to turn the average ambition loose in that magnificent opportunity where buildings and scenery and the countryside could be made one and express something noble, something worthy of our Nation, something you could call American architecture.

This present effort, as we see it, on the record, is said to be a picture of a picture of a picture. A picture of what? A picture for whom? Who paid for the picture? The American people. How much? For what purpose?

I would like to know, myself.

Senator STENNIS. Mr. Chairman, may I ask a question?

Senator CHAVEZ. You certainly may, Senator.

REACTION TO ACADEMY PLANS

Senator STENNIS. Mr. Wright, I have not had a chance to read your statements. I went out to the city with Secretary Talbott about a month ago when these plans were first disclosed. That is, these pictures that you refer to. I was impressed with the city. I was disappointed with the plans in that they were a shocking contrast to the surroundings, as I saw it.

Mr. WRIGHT. Shocking is the word.

Senator STENNIS. What do you suggest? I know Secretary Talbott is very much concerned about this. I judge he has never been completely pleased with those plans.

Mr. WRIGHT. I think he ought to have it on his conscience.

Senator STENNIS. I am sure he does. I do not join in any reflections on Secretary Talbott at all on this matter because he is very much concerned about it.

Mr. WRIGHT. There is no reflection upon anybody except the intelligence of the people of the United States in allowing a thing like this to happen continuously. This is not the first time. This will not be the last time until some better way of arriving at conclusions concerning what is characterizing the country culturally.

Senator STENNIS. I want to get down to a concrete suggestion from you if I can. I wrote Secretary Talbott when I got back and from the layman's standpoint I suggested that a committee of educators be called in to pass on this matter from their viewpoint, in building buildings that inspire and of a cultural background, and appearance, along with the rugged beauty of the Rocky Mountains.

That is as far as I could go.

What do you suggest?

SUGGESTION FOR PAID COMPETITION

Mr. WRIGHT. I suggest a fresh start and a paid competition, a nominal sum given to men chosen for their creative ability in the various strata of our life. We are passing away now from the old sort of thing that characterizes Washington.

Senator STENNIS. You mean a group of architects?

Mr. WRIGHT. Say, three, selected for their capacity to put something into this besides mechanisms.

Senator STENNIS. Three architectural concepts?

Mr. WRIGHT. Then I would suggest as a tribunal, the young people of this Nation. I would have the three designs made into brochures and send it to the principals of the high schools of the Nations and let the children—we won't call them children, I think they are referred to as teen agers—vote on it and you take that result and decide how it is to be executed. I would like to see some native appreciation concerning what we call architecture. It is the mother art. There is no culture without it as a basis.

Why not make it educational. Why not get something out of this fiasco for the people of the United States and that means the young people, doesn't it?

Senator STENNIS. As a general proposition, do you not think the architecture should blend with the surroundings of that area?

Mr. WRIGHT. It has been the ambition of my life to make it come true. I think everything I have built you will see there.

Senator SALTONSTALL. How were these plans conceived?

Mr. WRIGHT. I did not quite understand.

Senator STENNIS. These pictures that are given to us, who drew these designs and how as the architecture chosen for them?

Mr. WRIGHT. I am sure I do not know.

Senator STENNIS. You simply object to what they have done.

Senator CHAVEZ. To the style?

CRITICISM OF PLANS

Mr. WRIGHT. No; I think the thing is a sort of a cliché. It is an imitation thing. It is not genuine modern architecture. It is a glassified box on stilts which is practiced abroad and has now become fanatic with certain of our commercial architects. They are the ones that unfortunately succeed to Government work. A man like myself would never be thought of in connection with a Government job.

So it all goes to the busy architect, the planned factory, the five or six hundred draftsmen. No inspiration; a la mode. When things get a la mode in the fine arts and the soul of our Nation, it is time to revolt. That is why I am here. I am uncomfortable being here. I suppose I have no business here. Yet I am here. I could not take this thing myself.

Senator CHAVEZ. I think you will find the committee most sympathetic to your general idea.

Mr. WRIGHT. Good, sir.

Senator CHAVEZ. I do not want to have a brick building in Albuquerque for the Federal building.

Mr. WRIGHT. If the thing is suitable for a poster for something on Park Avenue, it is not suitable for something out in this glorious city in Colorado and that is what has happened to it.

In the first place, the thing on Park Avenue is not original.

Senator CHAVEZ. I wanted to get your views and that is why I sent you a telegram inviting you to come before us.

Mr. WRIGHT. I am honored to come. I came down here because while they have said that I am disgruntled because I did not get the job, I am disgruntled because the thing is the way it is, regardless of any personal interest except for the cause of architecture. Whatever happens, for God's sake, let us have something superior to what now has been offered to characterize this Nation for the next 300 years. We are not that low. We do have something under here in our vests and our souls and this does not express it. This is just about as high as a wayside market in the wrong place.

Senator STENNIS. Mr. Chairman, as I understand these plans have not been approved by the Secretary.

Senator CHAVEZ. They have not.

Mr. WRIGHT. Your Honor, it would be interesting to know how much this picture of a picture of a picture has cost the people of the United States already. I think the figures should be submitted.

Senator CHAVEZ. Do you care to have some of these associates of yours testify?

Mr. WRIGHT. I have given these documents that I referred to to Mr. Sarra here, and I have said clearly what I have only here hinted at and have not had the time to say.

Senator CHAVEZ. All right. Mr. Sarra.

Mr. SARRA. Thank you, Senator.

I believe you have a list of people who have brief statements to make.

Senator CHAVEZ. Are they going to discuss plans or material?

Mr. SARRA. They are going to discuss the availability of materials and comparative costs.

Senator CHAVEZ. Mr. Plummer.

ALLIED MASONRY COUNCIL

STATEMENT OF HARRY C. PLUMMER, DIRECTOR OF ENGINEERING

GENERAL STATEMENT

Mr. PLUMMER. My name is Harry C. Plummer. I am here in my capacity as chairman of the engineering committee of the Allied Masonry Council. The Allied Masonry Council is an informal alliance of the major masonry producers, contractors, and labor forces of the heavy construction industry. Council supporters include the Structural Clay Products Institute; the Building Stone Institute; the Indiana Limestone Institute; the Marble Institute of America; the Mason Contractors Association of America; and the Bricklayers, Masons & Plasterers International Union of America, AFL.

USE OF MASONRY MATERIALS

We have been an interested observer of this Air Force Academy controversy. However, we are entering the dispute as of now because of a damaging and misleading statement made recently by the Air Force. This statement implies that masonry materials are not suitable for major use in the Air Academy construction because they are too expensive.

I will quote from a New York Times story of July 11, as written by Hanson W. Baldwin. Mr. Baldwin, who visited the site of the proposed Air Academy on June 10, had this to say:

It is probable that when the architectural skirmishing has been finished, the final style that will evolve will be a modified contemporary functional, utilizing much metal and glass. The use of too much stone as at West Point and Annapolis is simply too expensive today. Air Force officers said * * *. Despite congressional critics, it seems certain that the cold, hard facts of economics will force the architectural style of the new academy into a modified modern mold.

This Air Force statement is a grave falsification of the facts. If deliberately so, it is reprehensible. If an honest mistake, it demonstrates serious ignorance on the part of the Air Force, and makes us wonder at the wisdom of entrusting this executive department with this large sum of the taxpayers' money.

The fact is that stone—as well as other forms of masonry—is cheaper than the type of construction proposed for the Air Academy. Both professional and lay opinions have been expressed concerning the architecture conceived for this plan. The Allied Masonry Council is here to set the record straight on the matter of materials. Air Force spokesmen—and we presume that they reflect the views of the Secretary of Air—say that masonry is too expensive today for this construction. They are wrong. Actually, there are two important considerations involved in discussing cost. These are initial construction cost, and maintenance cost. I will cite several examples of masonry's economy.

MASONRY ECONOMY

The Tishman realty firm of New York City plans construction of a \$40 million skyscraper of 38 stories at Fifth Avenue and 53d Street. The plans for this handsome building call for limestone piers—columns of stone—selected to harmonize with the solid dignity of the nearby Rockefeller Center group of buildings. In deciding upon the type of building materials, the firm's architects, Carson & Lundin, made comparative cost studies of various materials.

Price studies were made for piers of limestone, stainless steel, and aluminum. In each case, the comparison was based on a 30-inch pier, or column, 11 feet in height. A stainless steel pier, it was estimated, would cost \$465. An aluminum pier was figured at \$265. A pier of limestone according to the estimates, cost \$115. These are installations or in-the-wall costs. I believe no further comment on this is necessary.

Let us cite another example—the Pennsylvania State Office Building in Pittsburgh's Golden Triangle. As Representative John Fogarty pointed out in the June 20 issue of the Congressional Record, aluminum was chosen as the facing material for this building. There were built 12-inch walls, 6 inches of aluminum and 6 inches of block backup. For purposes of comparison, let us take a 10 inch cavity wall of brick and tile. This would provide a thinner wall and make more room available. Now the 12-inch metal walls of this Pittsburgh building will pass a 2-hour fire test. The 10-inch brick and tile wall mentioned will pass a 4-hour fire test. The square-foot cost of the aluminum wall built here was \$6.73 in place. The square-foot cost of the brick and tile wall, using glazed face brick, is \$4.31 in place, a saving of \$2.42 per square foot. The in-place figure for masonry

takes into account the cost of structural steel and fenestration. The time involved in construction is the same for both materials, 6 to 12 months.

You gentlemen may remember an article which appeared in Life magazine last year. It was alleged that the metal walls of a new building at Park Avenue between 49th and 50th Streets in New York City were actually erected in 1 day. As a matter of fact, the late Mr. John Mulligan, one of the Nation's leading contractors, established that a crew of 20 men spent 5 months preparing for that day of installing those metal panels in place. At least 1 week before the 1-day publicity stunt was staged, all construction trades were laid off while special crews set all the panels in the proper position for the special installation. For this building, there were built two metal walls and two walls of glazed brick. Mr. Mulligan wrote the bricklayers' union a letter which states that all the masonry in the building, including materials and labor, plus the masonry backing for the metal panels, cost less than \$250,000. The metal walls cost more than \$1 million.

I will submit another example involving cost of materials. In last January's issue of Architectural Forum, there was an article on New York's new Socony-Vacuum Building. I will quote two paragraphs from the story:

And what about the added cost? Asked Harrison & Horr (the architect and builder). Would not a stainless steel skin cost half again as much as brick? But the steel industry wanted the building, and the cost was not going to prevent them from getting it. To meet the competition, they were willing to write off any price differential as the cost of promoting steel.

MAINTENANCE COST

Now let us consider the cost of maintenance. I understand that aluminum panels are recommended for exterior-wall use on several of the Air Academy buildings. I have here a photostatic copy of a letter written by the Sibbald Mason Contracting Co., to the Structural Clay Products Institute. The contractor discusses the aluminum-and-steel construction of the new Statler Hotel in Hartford, Conn. He has this to say, and I quote:

I have observed and been informed by the architect and vice president of the Statler chain of an existing condition that has caused considerable anxiety due to several facts as, namely, (1) it is difficult to hold calking in place to stop leakage as vibration from wind is severe; (2) shrinkage in aluminum on an 80-foot span is 1 inch; (3) discoloration varies in panels in less than 1 year; (4) dirt seems to be more noticeable on aluminum panel than on the white Hanley brick used on same building.

This, I believe, gives us an indication of the maintenance problems and costs which the Nation's taxpayers would be obliged to face with the present plans for the Air Academy. I noted with interest that the architects who designed the Air Academy also designed the Lever Bros. glass building in New York City. It is said in building circles that the Lever Bros. building was fitted with special scaffolding to allow the sides of the building to be washed frequently. This scaffolding, which was erected on the roof, is said to have cost \$250,000. The maintenance costs involved in washing the building must be enormous. Now the Washington newspapers recently published stories concerning the cleaning of the exterior of the National Press

Building—the first cleaning of this stone structure in 28 years. The renovation process, according to the stories, cost less than \$10,000. I think these two examples rather clearly illustrate masonry's advantages as regards maintenance.

Of course, it is well established that stone, brick, marble and other forms of masonry require little cleaning—they grow more beautiful with age. I will leave with the chairman a number of photostats which will document what I have said.

Masonry is an age-old material which has proved its worth since the days of the Pyramids. At the same time, it is as modern as the 20th century. There are many, many examples available of fine, modern architecture of all types, utilizing these proven materials.

Gentlemen, let me conclude by saying that in my 20 years' experience in this field, I have never met one responsible person, designer or engineer, whoever claimed that metal or glass could compete with masonry cost.

Thank you, sir.

Senator CHAVEZ. Thank you, sir.

The next witness will be Mr. Murphy.

BRICKLAYERS, MASONS, AND PLASTERERS INTERNATIONAL UNION OF AMERICA,
AFL

STATEMENT OF JOHN J. MURPHY, SECRETARY

PREPARED STATEMENT

Senator CHAVEZ. Will you highlight your statement and we will insert it in the record in full.

(The statement referred to follows:)

STATEMENT OF JOHN J. MURPHY, SECRETARY, BRICKLAYERS, MASONS AND
PLASTERERS INTERNATIONAL UNION OF AMERICA, AFL

Gentlemen, my purpose in appearing here today is to offer the services of our 130,000 skilled craftsmen in building this Nation's third great service Academy. Speaking for our international president, Harry C. Bates, and the members of our 1,000 locals, I can assure you that the American bricklayer and stone mason is vitally interested in having a part in the construction of this national memorial. We are proud, not only of our skills, but of all opportunities, past and future, to contribute to the national defense and to the heritage of America.

Word has come to us that, at the unveiling of these Air Force Academy models by the architects last May 14, several Congressmen were told that masonry was being ignored because there are not enough craftsmen to do the job. This, gentlemen, is absolutely untrue. The international union is well-equipped to handle this project. We will furnish you with the men you need, where you need them, at any time you call upon us. We will furnish you with top craftsmanship and speedy construction.

The international union is interested in producing the highest quality of work by the most economical means and in the shortest time possible. Proof of this, I believe, lies in the fact that we sit down regularly with the producers and contractors of this industry to discuss product research and development, faster and better work techniques, and successful applications of packaging and handling materials. We endorse the mechanized work systems which are employed today by masonry contractors.

In order to assure a steady flow of skilled craftsmen into the construction industry, the international union sponsors an aggressive apprenticeship training program throughout the United States. At this time, we are training approximately 16,000 apprentices. In this effort, we are assisted by producers, contractors, and educators. As President Bates has said previously, we are not in the least afraid of the development of automatic machinery. Our Nation's experience