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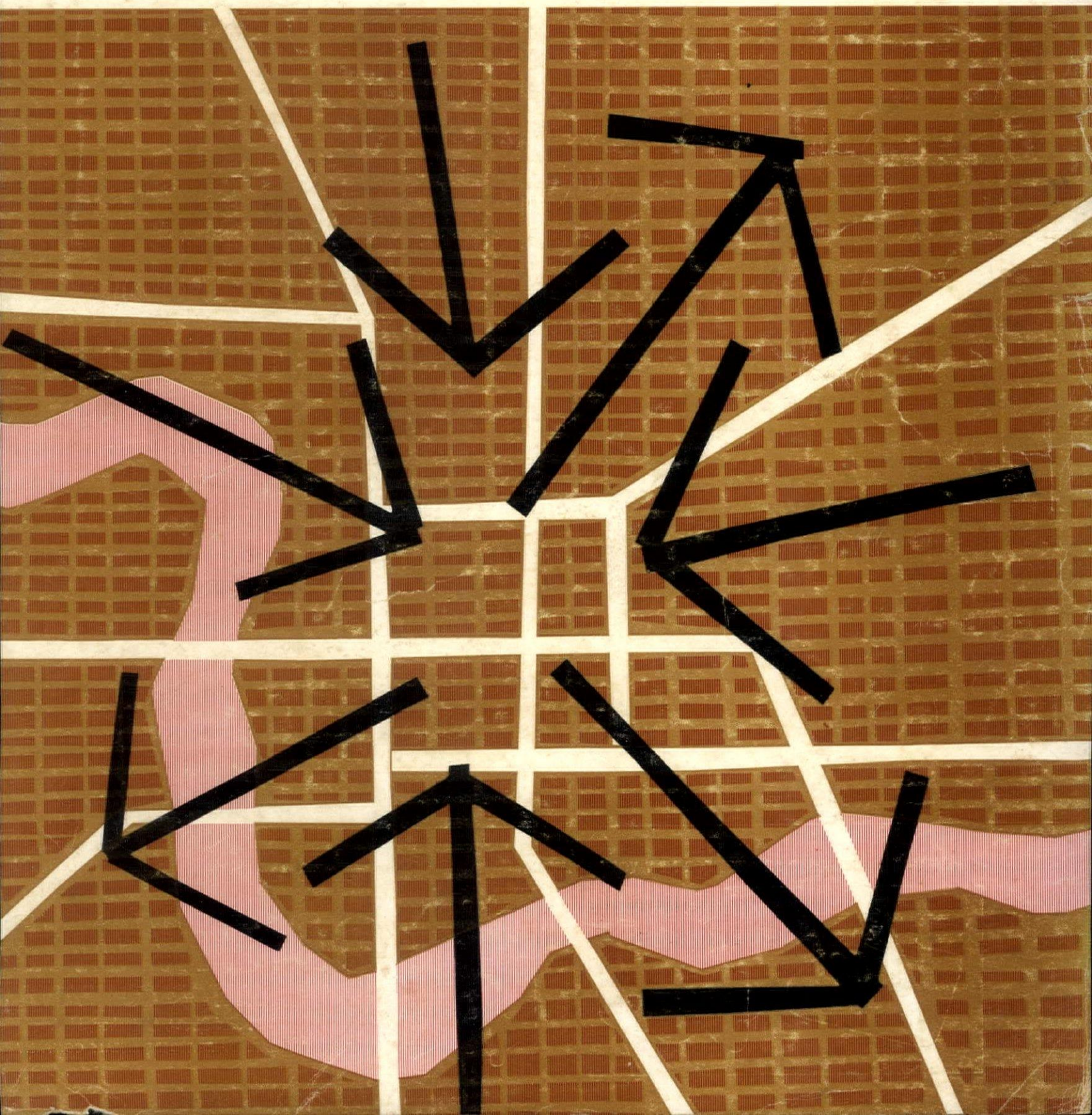
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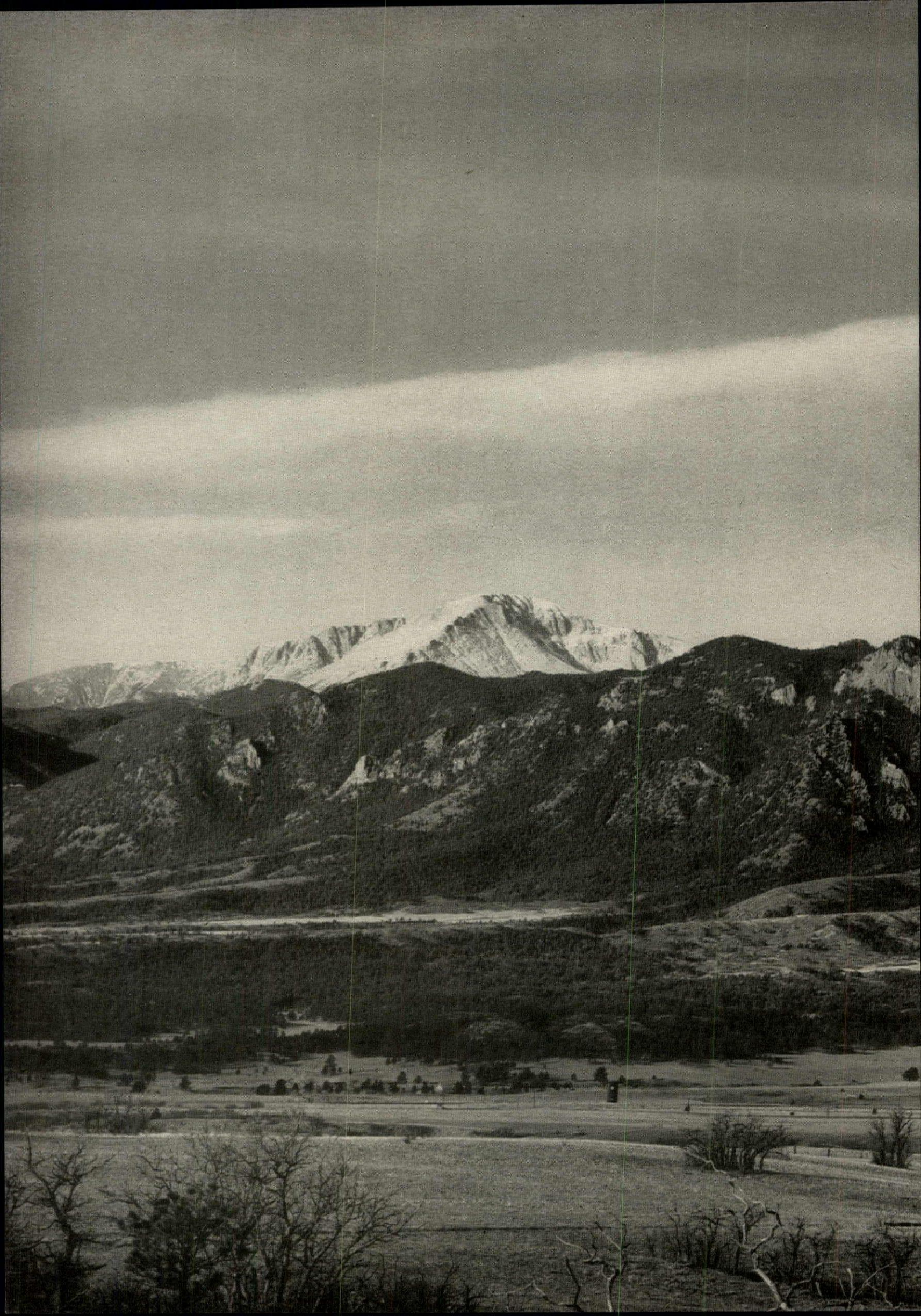
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ew of Air Force Academy in Colorado (p. 100)... Prudential's five new Rocks of Gibraltar (p. 140)

to rebuild our cities downtown—a Round Table report (p. 122)

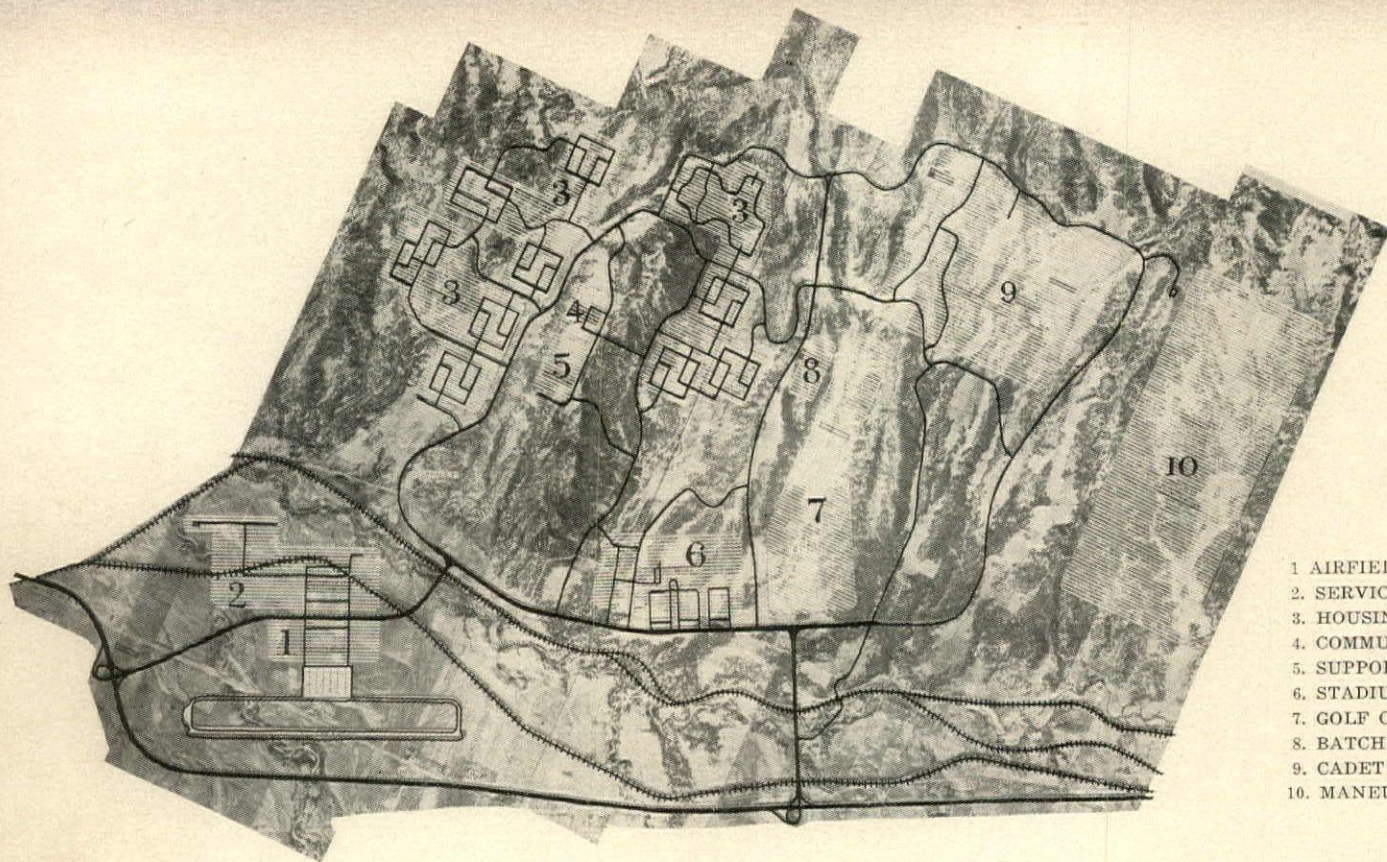




Across this expanse of Rocky Mountain tableland

will be built...





1. AIRFIELD
2. SERVICE AREA
3. HOUSING
4. COMMUNITY CENTER
5. SUPPORT PERSONNEL
6. STADIUM
7. GOLF COURSE
8. BACHELOR OFFICERS
9. CADET AREA
10. MANEUVER AREA

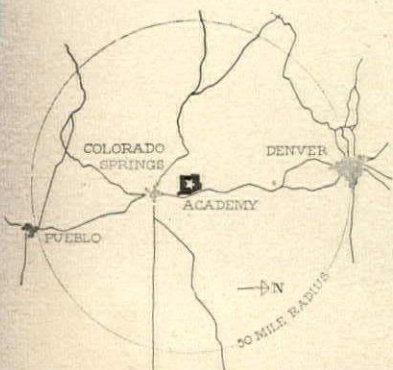
...THE UNITED STATES AIR FORCE ACADEMY

Last month in high Colorado, at the foot of Pike's Peak, the US Air Force showed several hundred dignitaries and journalists the first plans and models for the projected Air Force Academy. It was an out-of-town tryout for a great architectural show—the first US national shrine to be designed in the modern style. The assembled critics and congressmen contemplated the glass and aluminum model buildings perched on the model mesas, boggled at the angular planes of the cathedral, were awed by the scope and magnificence of the site and pronounced the whole presentation a solid hit. Thus passed, quietly, the eclectic era in government architecture. With the new embassies abroad and the Air Academy at home, the US has come to grips with architectural reality.

In the eight months they had sweated on the project, Architects Skidmore, Owings & Merrill had not presumed to solve everything. They showed no complete design. But in their brilliant organization of the 27 sq. mi. site, they made a firm, bold proposal of how they wanted to execute the commission: in light, precise academic buildings faced with glass and aluminum, consolidated on an acropolislike central mesa—scaled not to squads, intimately, but to squadrons, broadly—and with a constant sense of the mountains and mesas around them. The peak lines of those mountains, the Rampart Range, wander delicately among one an-

other far up. They are like mountains in Japanese prints, but less severe. The rolling tableland before them wears a coarse covering of brush, sere grass, patches of red clay and, luckiest of all, black pine forests spilling into the minor valleys, filling them with green-black pools of foliage, outlining ridge lines. Then the foot land rolls on forever. Against this vista "the buildings themselves should seem unimportant," said Nat Owings in making his presentation.

He said also that the designers (directed by Gordon Bunshaft of the New York office, with Walter A. Netsch Jr. heading a full-time crew in Chicago) were attempting an architecture with "a national, not a regional character, the direct simple way of life, as styleless as the most modern guided missile . . . timeless." But he was understating style, of course, for good architecture must always represent a time, either following or creating a tradition. This is why West Point, awkward as it is physically, is a memorable image in the national mind. Graduates call it the fort, and that is how it began. (Architects Cram, Goodhue & Ferguson then rooted it firmly in the Gothic.) Annapolis, sentimental as its architecture is, has the gentility which has long distinguished the Navy's image of itself. (Architect Ernest Flagg's designs, in 1899, were French Renaissance.) SOM's models indicated their Air Force architecture will be traceable directly to the dynamic tradition of the great airplane hangars and the airplanes themselves. It will be straight, simple US industrial age idiom, but with the added refine-



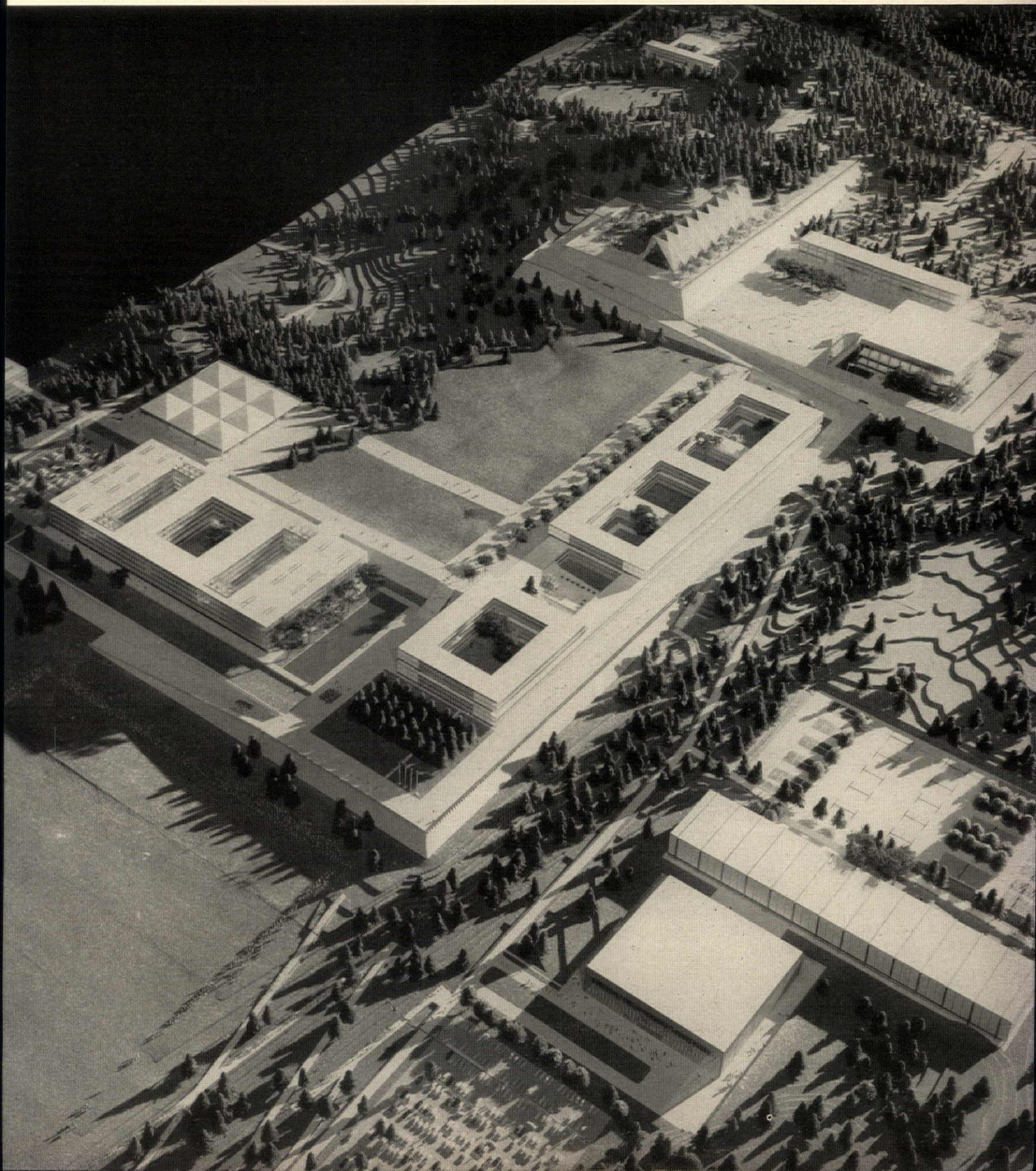
DIRECTING OFFICERS AND AGENCIES

Harold E. Talbott
Secretary of the US Air Force
General Nathan F. Twining
Chief of Staff, US Air Force
Lieut. Gen. Hubert R. Harmon
Superintendent, US Air Force Academy
Major Gen. L. B. Washbourne
Assistant Chief of Staff, Air Force Installations
Col. A. E. Stoltz
Director, Air Force Academy Construction Agency

Ellery S. Husted
Consultant, Air Force Academy Construction Agency
Welton D. Becket, Pietro Belluschi, Eero Saarinen
Architectural Consultants to the Secretary of the Air Force

ARCHITECTS & ENGINEERS FOR THE AIR FORCE ACADEMY

Skidmore, Owings & Merrill
Moran, Proctor, Mueser & Rutledge;
Robert & Company Associates; Syska & Hennessy, Inc.,
consulting engineers



ment of what Owings called "global style."

The commission who picked the site could hardly have done better. They got both sweep and verticality. The Air Force cadets will live with the sky. When they go from room to room in their classroom building they will step out into halls walled outside with glare-resistant glass—but sliding walls, so the cadets may actually be walking on exposed galleries. Some days they will squint, but the basic Air Force expression is a cowboy squint, shrewd and appraising. (West Point and Annapolis, incidentally, have already warned the Air Academy that they will not send their football teams up there to play. The air is too thin. The airmen will have to descend.)

The Air Force wants to move into the academy in the fall of 1957; this July they will start their first class of 300 cadets to school in temporary quarters in Denver. The planned eventual complement for the Academy is 2,500 cadets, 725 officers, 760 airmen (enlisted men) and

ACADEMIC GROUP has been nicknamed the Acropolis. On or beside it will stand the cadets' world: barracks, classroom building, mess, social center, administrative building, drill fields and athletic facilities. Of this central group, the barracks is the center of gravity. Although the rest of the 17,500-acre site is laid out frankly on an automotive scale, roads do not penetrate here. The cadet will be able to walk everywhere he needs to go except to the airfield.

The mesa will demand a good deal of walking up and down. Ramps are used extensively, but SOM is also designing outdoor stairs proportioned to a marching group.

Masonry will be used to make a transition from the natural landscaping (trees are being preserved) to the metal and glass buildings. The masonry retaining walls, as high as fair-sized dams, will be native stone, slanted in outline, stiffened at their top in a crimped piecrust pattern. The walks and formation spaces under barracks will be textured precast terrazzo of local stone, much of it very dark to cut down on reflected glare. The next transition toward the aluminum and glass upper walls will be polished granite used on the first levels as screen walls between the aluminum-clad columns.

CLASSROOM BUILDING is to be a galleried structure, with 14'-wide overhangs used as hallways, glazed completely with sliding walls. Most classrooms are small, for 15 students, and deliberately are withdrawn into the interior of the building, with clear glass on their outer partitions only from the 7' level up. Chalkboards will run all the way around the classrooms, permitting the whole class to work at them simultaneously. Between classes, cadets will be able to relax their eyes with the great views from the gallery.

Glazing will be gray glare-reducing glass; heating will be warm air, exhausting to the corridors. Corridor walls will be various bright colors, to shine through the gray glass.

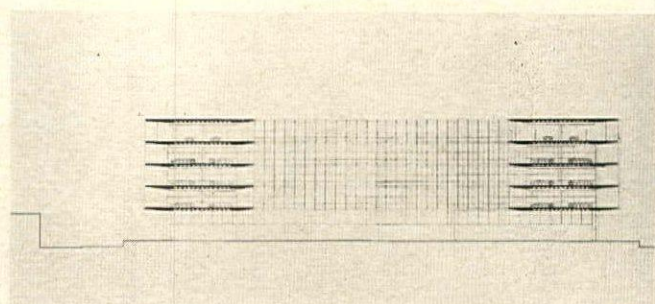
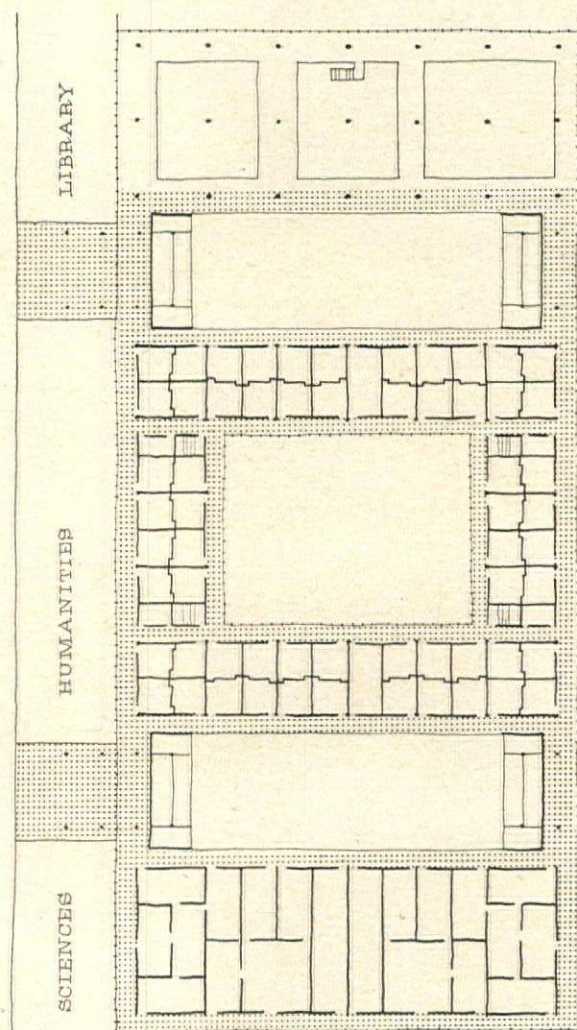
This building, really three buildings tied together by vertical circulation stacks which enclose courts, will have the library facing north, the humanities in the center, and the sciences facing south (the direction available for expansion). Base floor is heavy labs, and top floor is faculty offices.

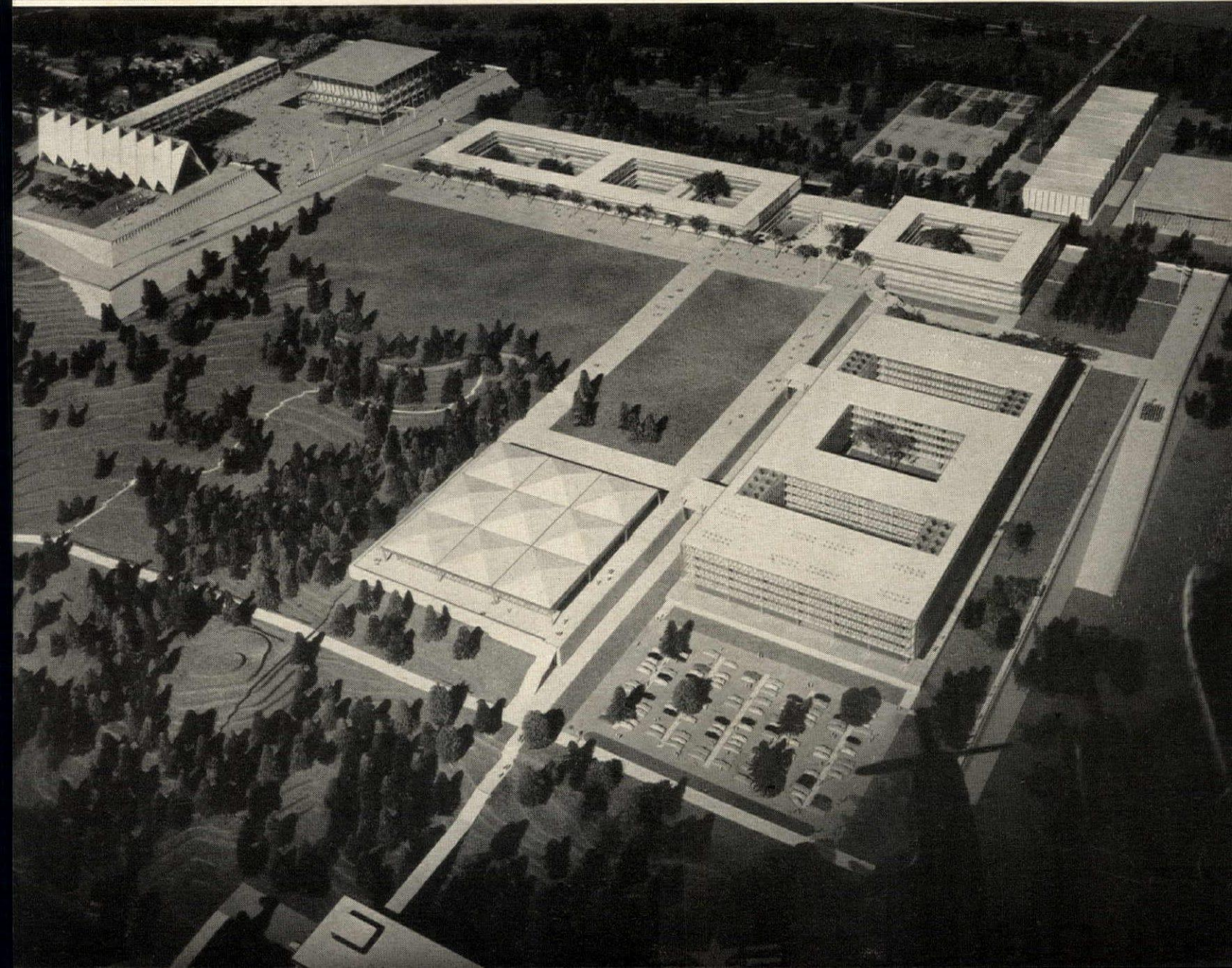
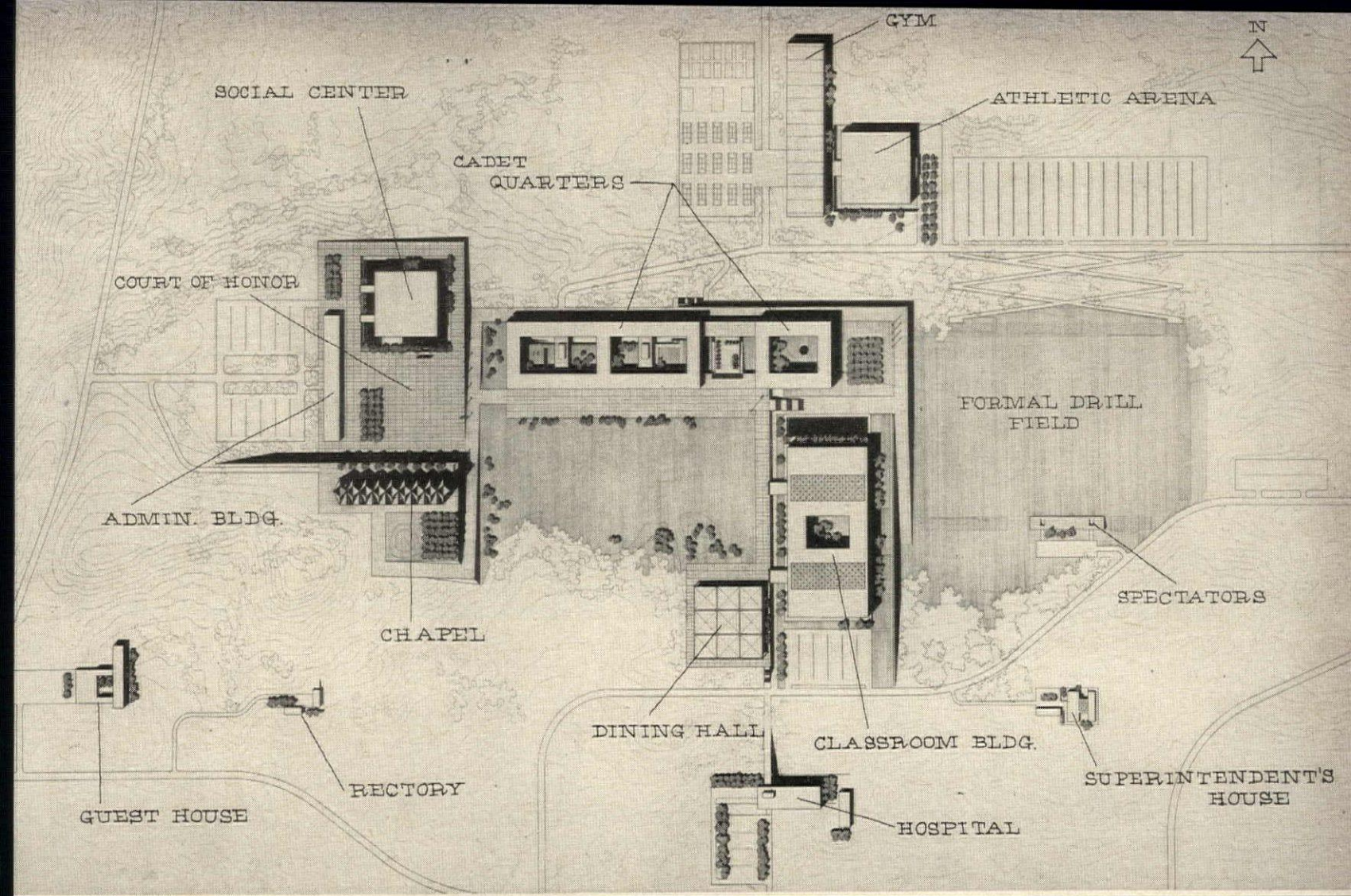
Cadets will have to climb a maximum of two flights of stairs to get to class; teachers will park cars on base level and take elevator to their top-floor offices.

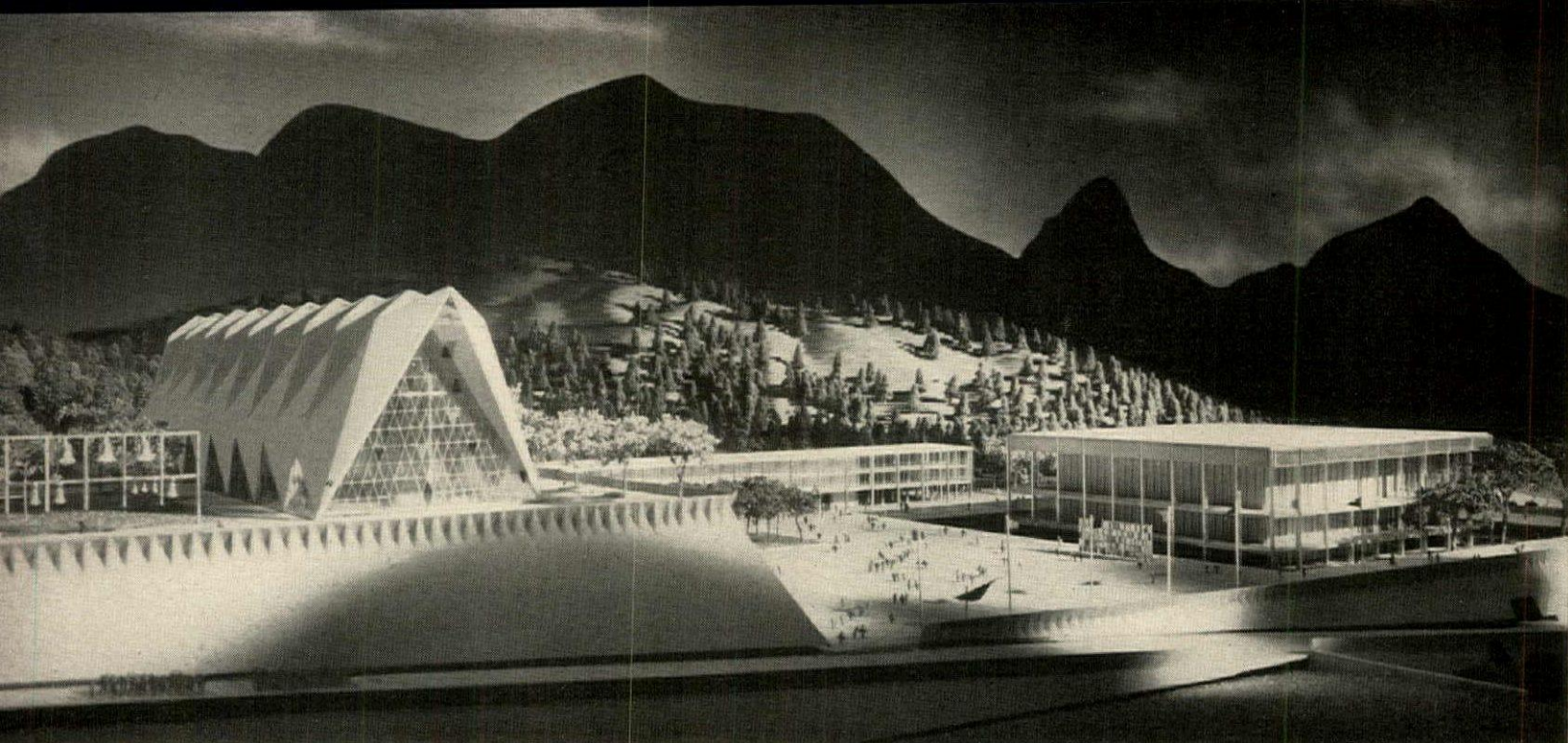
At this early stage of design all the buildings on the site are laid out on an over-all grid of 56'.

2,300 civilians. Of \$126 million budgeted for the project, \$31 million is for flying facilities, \$36 million for staff living quarters, \$58 million for the Academy itself.

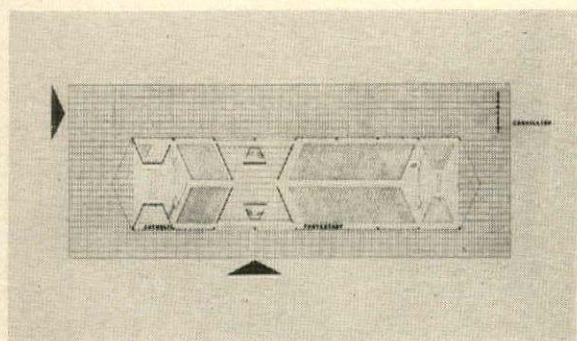
The cadets actually will not do very much flying here. Lieut. Gen. Hubert R. Harmon, Academy superintendent, says sharply: "The Air Academy is not a flying school or in any sense a trade school." Cadets will get only navigation training at the Academy, then take flight training postgraduate elsewhere. But when the Air Force cadets are drilling on the parade ground, learning discipline, shouldering their rifles, they can always glance up at the mountain peaks and know they're headed up there in the sky eventually. It is certain that when they graduate, they will carry a great sentimental nostalgia for the efficient metal and glass Academy sitting on the Incalike stone bases. Where the West Point cadets have their ramparts to remember, the Colorado Springs cadets will have their Rampart Range.





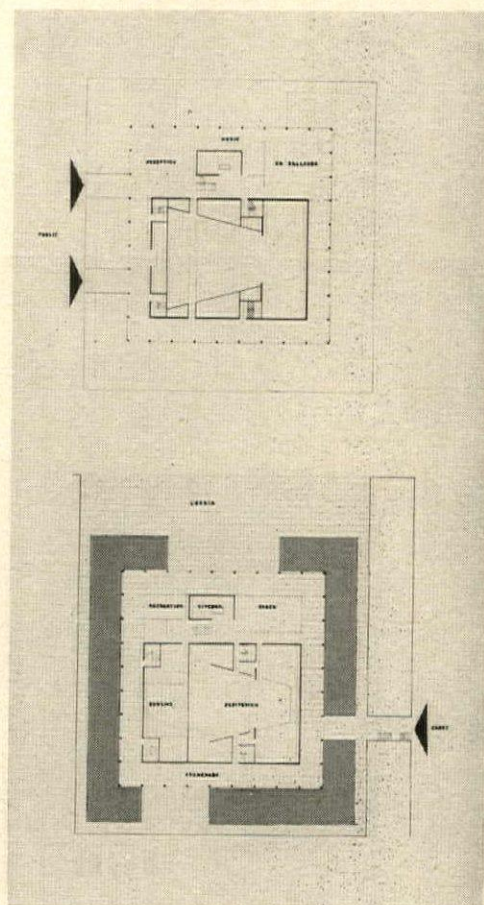


AIR FORCE ACADEMY



CHAPEL (left and above), still under study, is shown in model as long, tall steel frame structure roofed in intersecting planes of marble. Protestant church occupies one end, Catholic church the other, and in the center on a mezzanine is area for Jewish services. Entrances are in center, and clear glass end walls have sections of stained glass.

SOCIAL HALL (right and above) is divided in strata. Lowest level, immediately accessible from cadets' quarters, will be exclusively theirs. Two upper levels, open to public, will be center for cadets' off-campus social life. Between social hall and administration building will be Court of Honor, commemorating Air Force heroes.



COLORADO SPRINGS is a tourist town, but a conservative one. Says a motel owner: "We don't get the Las Vegas crowd, but mostly older people who like to sit around and rest." The population is 75,000, and it is quite happy to get the Air Force Academy. There is little or no industry. The biggest thing in town, at present, is the Broadmoor Hotel at the foot of Pike's Peak, a large, rather expensive place to sit and rest in luxury.

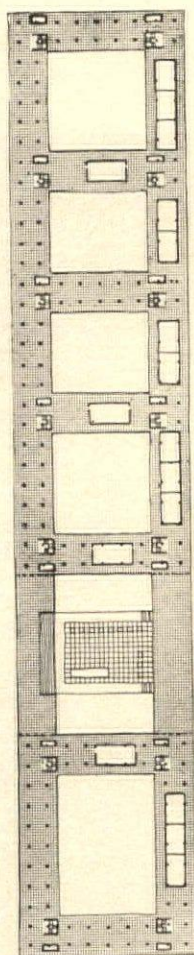
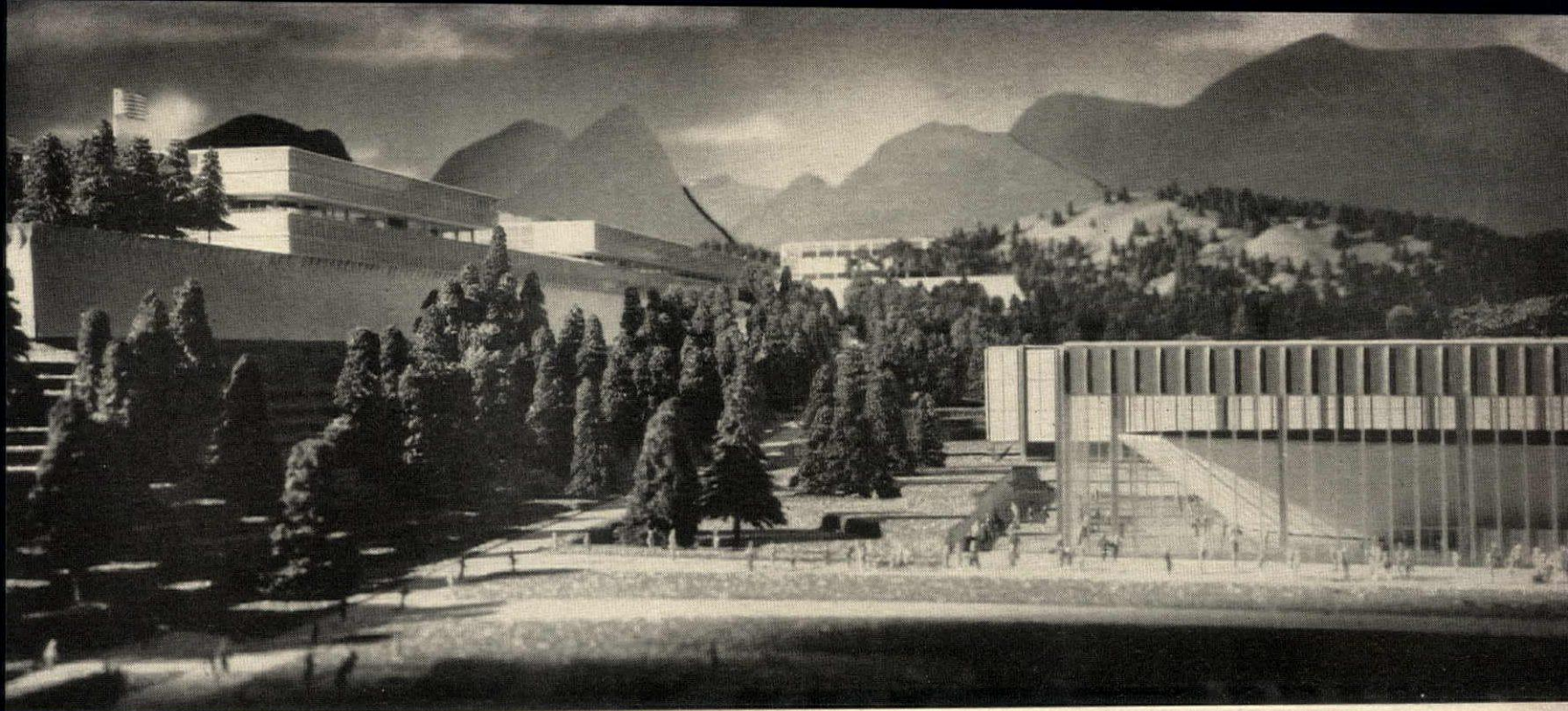
A recurring source of conversation in

Colorado Springs is water. (The weather is so good it is taken for granted.) There is little rain, and too many wells would endanger the water table below, so there is mild civic rationing for watering lawns, etc.

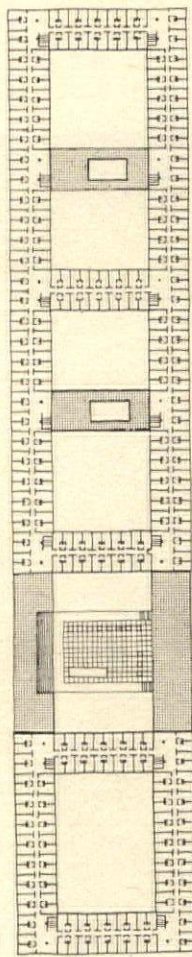
The new Air Academy will drink or otherwise use 5½ million gal. a day. Some local residents wonder where it will come from, but few really are worried. "The Air Force," they say, or "Congress." Probably at least part of the solution will be to pipe water from the other side of the Rockies,

where the Pacific clouds dump cargo to get over the divide.

Of the approximately 17,500 acres of the Air Force site, 8,800 have been acquired. The smallest parcel was three acres, bought for \$18,000, the largest a 4,630-acre ranch, bought for \$300,000. The Colorado Land Acquisition Commission can condemn land if it wants to, but it does not want to, and the Air Force does not want it to. The state of Colorado is contributing \$1 million, a third of the expected cost of the land purchase.



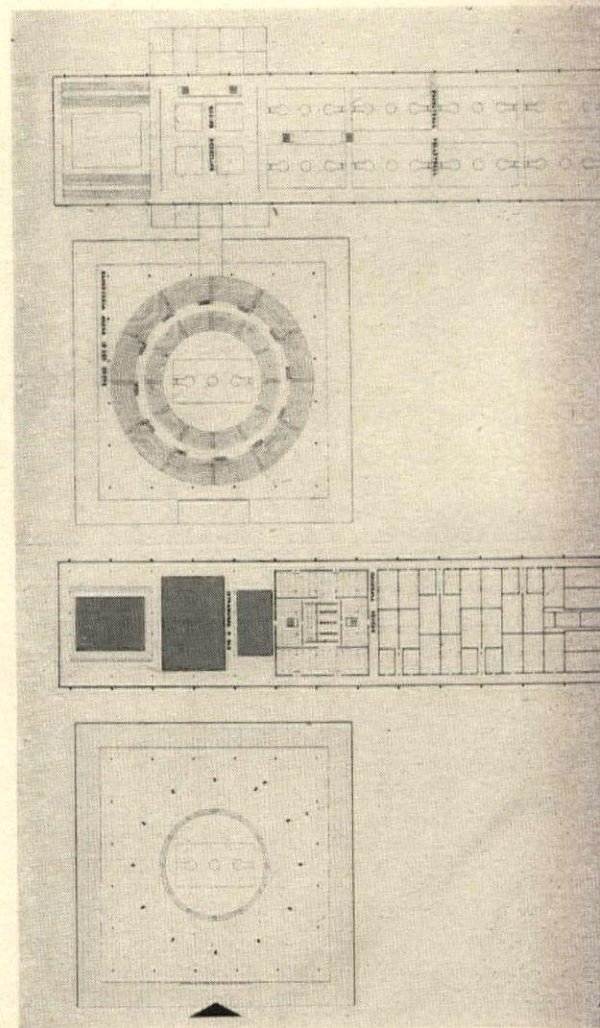
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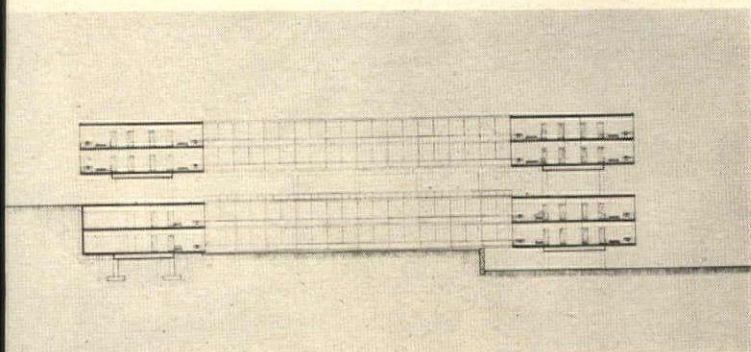
TYPICAL UPPER

CADET BARRACKS are designed on a 3'-6" module vertically and horizontally. A barracks building will be almost but not quite as long as the formations its occupants will have to stand thrice daily. The core, however, aims for the Oxford intimacy of contained courts and gardens. First studies included a number of smaller buildings in place of the large barracks, but the sloping site made a good arrangement impossible and hindered future expansion. Moreover, the architects were eager to build a complete unit rather than waiting 50 years to attain a final interlocking entity.

Entering from the high side on an open level, cadets will have to walk a maximum of two flights up or down to their rooms. The rooms themselves are still under study, but will probably have 300 sq. ft. for two cadets to share. Windows will be clear glass, and Architect Bunshaft is working on a scheme to issue washable drapes on the same basis as the cadet's bedding.



ARENA BUILDING in athletic complex below academic buildings will house inverted truncated cone of seats inside straight glass walls. Intercollegiate basketball will be the big sport here, but this space will also be used for Academy gatherings of a ceremonial nature.

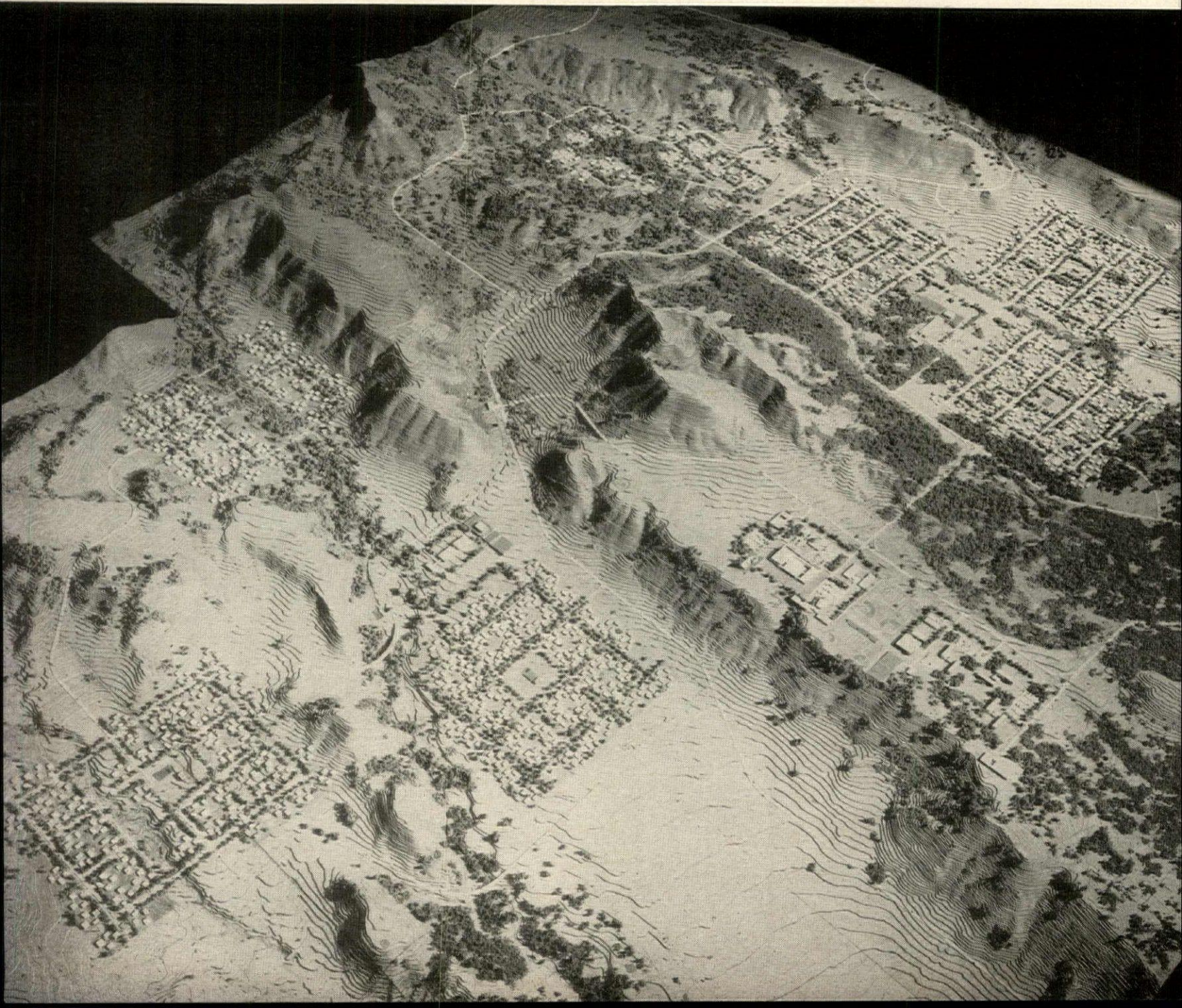


SERVICE AND SUPPLY

AIR FORCE ACADEMY

AIRFIELD

AIRFIELD, directly off the main road into the Academy, is on relatively flat land occupied at present by a small private air strip. The runway, 8,800' long, is oriented to avoid covering built-up areas of Colorado Springs with approach zones and flight pattern; also to avoid the elevated terrain to northeast. Steady wind conditions allowed a single strip. Included in the airfield group will be hangar, operations tower, shop, cadet high-altitude-flying training, parachute and dinghy repair shop. The airfield is not a major part of the Academy; most of the cadets will go elsewhere for pilot training as postgraduate work. Photo opposite shows supply and service buildings in foreground, airfield in background.





HOUSING: six neighborhoods, each with 130 single-family houses, surround a mesa occupied by a community and shopping center, chapel, library, high school, etc. In each neighborhood, as presently conceived, is an elementary school and three subneighborhoods with nursery schools. No through-streets cross the individual developments, and their seeming grid-rigidity of plan at this point probably will be tempered by the contours. "This is just a diagram now, but when we lay the diagram on the land, we'll bring the curves in. We have merely stated a principle of neighborhood division so far," says Bunshaft. Netsch adds: "We didn't want suburban sprawl." Additions to the individual communities will be limited to "creeping expansion," adding more houses only across the outer streets.

Across a recreation area from the community center will be apartments for support personnel who work in the airfield shops. Neighborhoods will deliberately be constituted to mix schoolchildren of officers and enlisted men. For officers, airmen and cadets, for young and old, the symbol of the Air Force Academy may well be Cathedral Rock, the immense outcropping to the north end of the long site, a full 175' high.



Photos (pp. 100, 101 & 109): Ansel Adams
Photos of models: © Ezra Stoller