

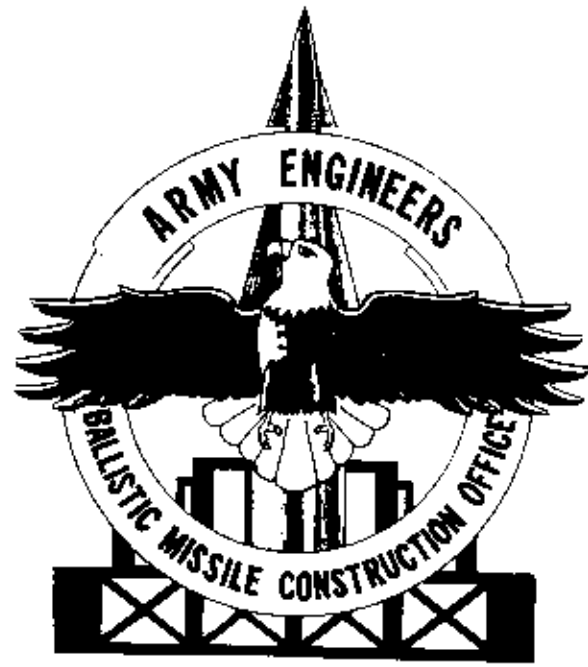
XVII-18-28
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U. S. ARMY CORPS OF ENGINEERS
BALLISTIC MISSILE CONSTRUCTION OFFICE
LOS ANGELES, CALIFORNIA

C E B M C O

HISTORICAL SUMMARY REPORT
OF
MAJOR ICBM CONSTRUCTION

NEWSPAPER DOCUMENTATION



LINCOLN AREA
ATLAS "F"



LINCOLN SQUADRON

NEWSPAPER DOCUMENTATION

OF

ATLAS F PROGRAM

Missile Bases Work 'Most Urgent of Jobs'

Sites Are Viewed by Itschner

By Bess Jenkins

"Aside from a war, this is the most urgent of jobs for us."

No. 1 on this job of building missile bases for the Air Force has the same urgency as wartime work.

These two comments — in one, two tempo — came from the Army Corps of Engineers' chief, the 3-star General F. C. Itschner of Washington, D. C., as he took rapid strides toward an awaiting Army helicopter.

It and another identically large chopper took the Pentagon-based general and his party of about a dozen general officers and assistants to 3 of Lincoln area's 12 Atlas missile launcher sites.

The group, representing the Army and the Air Force identified with the construction of the nation's missile bases, arrived in Lincoln from the east and west coasts Thursday night.

The visit was described as a routine one of regularly scheduled inspections, which Gen. Itschner is making where his Engineers are constructing the missile bases.

Gen. Itschner, in the Army Corps since 1924, symbolizes the trend of the job of the Engineers down through the years.

He said:

"My first job in the Corps was to help build the Alaskan roads back in 1924. There have been many of those, many dams since. But this is the most urgent of all."



GENERAL IS BRIEFED—A glass-paned door permitted this photograph of the briefing given by Col. Harry Woodbury (standing), Omaha District Army Engineer, to Lt. Gen. E. C. Itschner (pencil in hand), No. 1 man in the Army Engineers Corps, and other top brass in the Air Force and Army, here Friday to tour some of the Lincoln area missile launcher sites. Maj. Gen. Keith B. Barney (left front row),

presently division engineer of the Missouri River Division, Omaha District Army Engineers, will go to Washington, D.C., next month for his new assignment as deputy Chief of Engineers. Col. Vernon Hastings, (hand to his face), is in charge of the Ofutt missile system and has been assigned the same duty for the Lincoln project by the Air Force Ballistic Missile Division.

York, Wilbur and Cortland were the 3 sites seen by Gen. Itschner and his group, both from the helicopter and from the ground.

York, known as Site 7 to Western Contracting Corp., who have the Army Engineers' building contract; Wilbur, Site 6, and Cortland, Site 4, all are in various stages of the 175-foot mining operation.

These will form the concrete-lined silos or underground nests for the actual missiles.

Work on the all-concrete launch control center (connecting to the missile silos) which will be 45 feet underground is under way at the Wilbur and Cortland sites.

Completion of the 12-site system by the Army Engineers is scheduled for July, 1961. At that time the job of the electronic or "black box" equipment under Air Force Ballistic Missile Division supervision will begin.

Mason Travis, project manager for Western Contracting Corp., has said the overall schedule for the Atlas system work is on time at this date.

In the party with Gen. Itschner were Maj. Gen. A. M. Minton, director of civil engineering for the Air Force in Washington, D.C., and Brig. Gen. Alvin C. Welling, who is the commanding general for the Army Engineers' newly set up Ballistic Missile construction office in Los Angeles.

The group left Lincoln Air Force Base soon after noon Friday for Salina, Kan., where they were to inspect another Atlas underground missile system, began 45 days earlier than the Lincoln counterpart.

Construction Will Start by Fall; Few Details Released

*Cost Approximately \$25 Million;
790 Persons to Handle New Unit*

An intercontinental ballistic missile base will be located between Lincoln and Omaha, it has been learned.

Announcement of construction of a base in "the Offutt Air Force Base area" was made by the Air Force in Washington.

Officials of the Strategic Air Command at Offutt Base near Omaha said they could not reveal the exact location of the base.

A reliable source reported, however, that the installation will be "more or less between the 2 cities" of Lincoln and Omaha.

Cost was estimated at \$25 million.

It was understood that the site would cover from 800 to 1,000 acres.

The Offutt area base will include only one missile launching site, it was reported. A base announced earlier for the Cheyenne, Wyo., area will be divided among several sites.

Maj. Gen. Joe W. Kelley, director of the legislative liaison of the Air Force, announced the Offutt missile base in a letter to Nebraska Sen. Roman Hruska.

The letter said the base will have about 750 personnel assigned to its operation.

Construction of the base will begin in the late summer or early fall of this year, Gen. Kelley said.

No estimated date for completion of the project was given in the Air Force announcement.

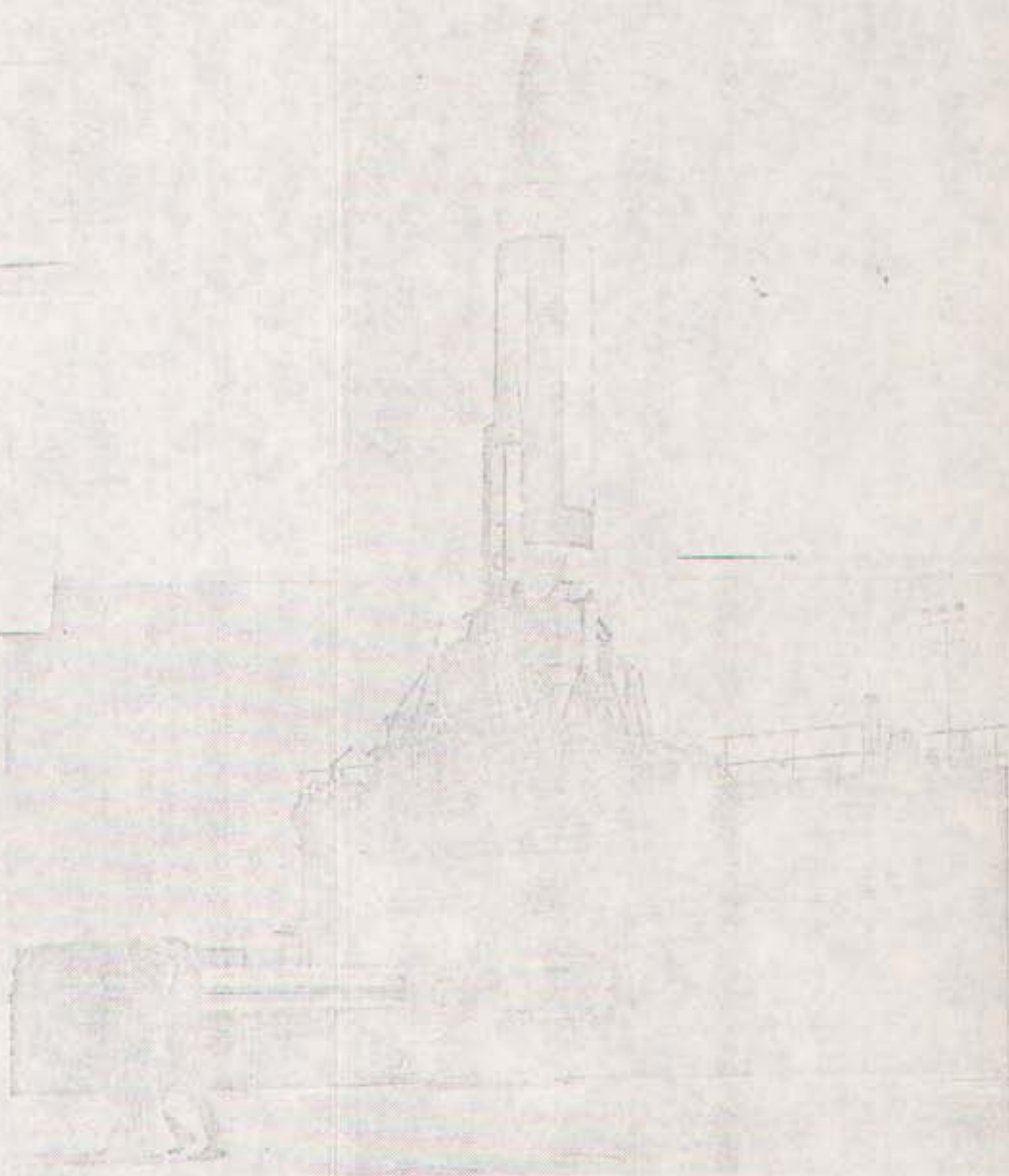
It was understood, however, that construction would proceed rapidly with completion expected in 15 to 18 months after its start.

Construction will be under the supervision of the Army Engineers with technical design under the Air Force Ballistic Missile Division at Inglewood, Calif., the Air Force announcement said.

Officials declined to discuss the technical design of the base or the type of missiles to be based there.

It was announced earlier that the Cheyenne base will use Atlas ICBMs. Construction of the Cheyenne installation has been put at \$65 million.

*Lincoln Journal
18 April 1958*



An Atlas missile on Canaveral launching pad.

Atlas Missiles to Soar From SE Nebraska Base

Atlas Intercontinental Ballistic Missiles will be launched from the proposed southeast Nebraska missile base.

This site, which will be announced in the near future, will probably be the old Mead ordnance plant near Wahoo, informed sources say.

Two other sites, also within a 25-mile radius of Offutt AFB, Omaha, are also possible.

Offutt will be the control and supply point for the missile bases, which are expected to have 750 men stationed there.

Cost of the project has been estimated at \$25 to 35 million.

OMAHA DISTRICT

LINCOLN JOURNAL, LINCOLN, NEB
30 May 1958

OMAHA DISTRICT

OMAHA WORLD HERALD, OMAHA, NEBRASKA
7 August 1958

'A.F. to Seek ICBM Sites'

Senator Chavez: Aim of Lincoln Survey

By Darwin Olofson

World-Herald Washington Bureau,
1220-22 National Press Building.

Senator Dennis Chavez (Dem., N. M.) said Thursday that a coming Air Force survey of the Lincoln Air Force Base area will be part of a search for new intercontinental ballistic missile bases.

He told The World-Herald the Air Force is "mainly interested" in finding sites for the Atlas, the Titan and Bomarc missiles.

The Atlas and Titan are intercontinental ballistic missiles and the Bomarc is an interceptor missile.

'For Some Time'

Senator Chavez, chairman of the Defense subcommittee of the Senate Appropriations Committee, said the Air Force "for some time" has been surveying sites for the Atlas and Titan, primarily west of the Mississippi River.

Bomarc sites are not being located in the Midlands, he said, but around the perimeter of the United States.

The Air Force already has announced the selection of four ICBM bases, including one near Offutt Air Force Base at Omaha. All are west of the Mississippi.

15 Additional Areas

The Air Force said Monday that new surveys would not lead to the immediate selection of sites.

Senator Chavez said the Air Force will survey about 15 additional areas, including Lincoln, in which ICBM bases may be located.

He cautioned, however, that just because an area is surveyed, "it doesn't necessarily mean a site will be selected there."

Altitude One Factor

Senator Chavez said the missile bases generally are of two types—"hard configuration" and "soft configuration." The "hard" type are those in which missiles are fired from under ground. The "soft" varieties are fired from above ground.

He said altitude is one factor considered in the selection of a site, since altitude increases the missile's range.

Senator Chavez said he did not know whether the Atlas or Titan would be the missiles used at new ICBM bases. The Titan has not yet reached the test-firing stage.

OMAHA DISTRICT

COUNCIL BLUFFS NONPAREIL, COUNCIL BLUFFS, IOWA
4 February 1959

**Consider Lincoln As
Missile Base Site**

WASHINGTON (AP)—The Lincoln, Neb., area is being considered for an Atlas, Titan or Minuteman missile base.

Rep. Phil Weaver (R-Neb) said Maj. Gen. Jacob Smart, vice chief of staff, told him the Air Force is expanding its facilities and preparing for the advent of the Minuteman.

Gen. Smart added that the Air Force is conducting surveys near a number of its bases to gather information on which site selections may be made at a later date.

**Air Force
Eyes Base
For ICBM**

**Rep. Weaver
Reports Survey**

The Air Force in a letter to Rep. Phil Weaver in Washington has confirmed that the Lincoln Air Force Base is one of the possible sites being surveyed for Intercontinental Ballistics Missiles.

The letter to Weaver noted that the Air Force "is expanding its facilities for the Atlas and Titan ICBM and is preparing for the advent of the Minuteman missile."

Choices of locations, the Nebraska 1st District representative was informed, will be based on such factors as geographic relationships to target areas, proximity of existing Air Force installations, cost factors involving land, construction, and labor.

Air Force headquarters are currently conducting surveys near a number of air bases to "assimilate information on which sound site selections may be made at a later date."

"By proceeding in this manner, we shall be able to use the most efficient and economical locations for this costly facility."

Weaver said his office is remaining in close contact with the Air Force concerning future developments.

OMAHA DISTRICT
HURONITE PLAINSMAN, HURON, SO. DAK.
10 March 1959

ICBM Base To Be Located At Lincoln

WASHINGTON (UPI)—The Air Force has disclosed that its seventh intercontinental ballistic missile (ICBM) base will be located at Lincoln Air Force Base, Neb.

The service issued a statement late Monday after it developed that congressmen already had been notified that Lincoln had been selected.

It said the Lincoln base was included in the Air Force construction program now pending in Congress for the fiscal year starting next July 1. The service refused to say whether Lincoln would have Atlas or Titan ICBM's.

An ICBM base, not counting nuclear warheads and the price of land, costs approximately 290 million dollars.

Question Is When

The Air Force disclosed previously that Atlas missiles will be based at Vandenberg AFB, Calif., Cheyenne, Wyo., in the Omaha, Neb., area, and in the Spokane, Wash., area. Titans will be based in the Denver area.

Forbes AFB, Topeka, Kan., also has been selected as an ICBM site but the missile it will fire has not been announced.

An aide to Sen. Carl T. Curtis (R-Neb) said he thought the appropriation for the ICBM base at Lincoln would have no difficulty going through Congress. But he added: "The question is when."

The Air Force said further details would be forthcoming as soon as Congress considers the money request. There was no firm indication when this could be.

The Lincoln Base now houses two air wings as an auxiliary to the Strategic Air Command headquarters at Offutt AFB, Omaha. The ICBM facility would also be under SAC.

Other Missiles Possible

The Air Force said earlier it was considering Lincoln as one of several possible locations. In that announcement, the Air Force said it was not limiting the survey to the Atlas missile. This left the door open for basing bigger and better missiles.

OMAHA DISTRICT
WYOMING STATE TRIBUNE, CHEYENNE, WYO.
10 March 1959

Lincoln AFB Will Be New Site for ICBM

WASHINGTON (UPI)—The Air Force has disclosed that its seventh intercontinental ballistic missile ICBM base will be located at Lincoln Air Force Base, Neb.

The service issued a statement late Monday after it developed that congressmen already had been notified that Lincoln had been selected.

It said the Lincoln base was included in the Air Force construction program now pending in Congress for the fiscal year starting next July 1. The service refused to say whether Lincoln would have Atlas or Titan ICBM's.

The Air Force disclosed previously that Atlas missiles will be based at Vandenberg AFB, Calif., Cheyenne, Wyo., in the Omaha, Neb., area, and in the Spokane, Wash., area. Titans will be based in the Denver area.

The Titan is a faster range and lighter-weight than the Atlas. It has been successfully tested twice.

It was doubtful that a medium range rocket would be deployed because of its distance, but the Minuteman fuel missile still under development was not out of the realm of possibility. The Titan, like the Titan, is launched from underground launching platforms.

The two medium bombers, the B-47, are now based at Offutt AFB, Omaha, and are capable of carrying nuclear weapons.

OMAHA DISTRICT
WYOMING EAGLE, CHEYENNE, W.
11 March 1959

Lincoln to Be Site of 7th ICBM Base

WASHINGTON—(UPI)—The Air Force has disclosed that its seventh intercontinental ballistic missile ICBM base will be located at Lincoln Air Force Base, Neb.

The service issued a statement late Monday after it developed that congressmen already had been notified that Lincoln had been selected.

It said the Lincoln base was included in the Air Force construction program now pending in Congress for the fiscal year starting next July 1. The service refused to say whether Lincoln would have Atlas or Titan ICBM's.

An ICBM base, not counting nuclear warheads and the price of land, costs approximately 290 million dollars.

The Air Force disclosed previously that Atlas missiles will be based at Vandenberg Air Force Base, Calif., Cheyenne, Wyo., in the Omaha, Neb., area, and in the Spokane, Wash., area. Titans will be based in the Denver area.

Forbes Air Force Base, Topeka, Kan., also has been selected as an ICBM site but the missile it will fire has not been announced.

Lincoln Is Picked for Missile Base

Associated Press Special Service

WASHINGTON (AP)—The airforce Monday designated the area of Lincoln, Neb., as the site for an intercontinental ballistic missile base.

A statement issued late Monday reversed the position given earlier in answer to inquiries in which an airforce spokesman said the Lincoln area was among several locations involved in surveys for future missile sites, but that the studies had not been completed.

The new statement said the airforce has added Lincoln to its request for construction authorization for the year starting July 1 and that after approval by congress additional details will be announced.

The airforce has previously announced six intercontinental ballistic missile base sites. Four have been designated to handle Atlas missiles. One site, on Lowry range near Denver, Colo., has been designated as a Titan missile site.

Another location, near Forbes airforce base near Topeka, Kan., has been selected as a missile site but there has been no public designation as to which missile will be placed there.

The four announced Atlas launching sites are Vandenberg airforce base, Cal., Warren airforce base, Cheyenne, Wyo., Offutt base near Omaha, Neb., and Fairchild near Spokane, Wash.

The airforce estimates the direct cost to build and equip an intercontinental missile base at about 290 million dollars. This cost excludes the warheads for missiles, the price of the land, if the government has to purchase it, and the training of men required to handle the missiles.

'Bathtub' Storage Is Possible for Atlases At Lincoln Missile Site

Appearance of Local Base Brings About Some Confusion

By Dave Burnham
and
Gordon White

Washington—Several Air Force officials said here the configuration of the Atlas intercontinental ballistic missile site in Lincoln has not been finally decided.

Earlier reports had indicated that the huge instruments of war might be placed in underground silos.

Though this possibility is not completely ruled out, a

slightly different picture is beginning to emerge.

One informed source believes the Lincoln Atlases will be stored horizontally in what he described as "large cement bathtubs."

To be fired, the missile would be raised to an erect position.

Further reports also indicate that the Atlas, resting in its cement bathtub, might be encased in a "steel coffin."

Launching would then involve withdrawing the missile from its steel encasing and placing it in an upright position. One informant said this could be accomplished with "tremendous speed."

Confusion over what the Lincoln missile site would look like has apparently been created by new technical developments in the Atlas program.

Earlier versions of the Atlas missile cannot be placed in any underground shelter. It is believed that the missiles to be placed near Offutt Air Force Base are of this early type.

First missile to be designed with the capability of being stored in the completely underground silos is the Titan.

Recent Atlas developments, however, have apparently allowed the Air Force a degree of latitude in Atlas "hardening."

The military construction appropriation bill for fiscal year 1960, containing details of the Defense Dept.'s building plans, has not yet been actually delivered to Congress.

Expected momentarily, it is thought the appropriations bill will spell out more firmly expected plans for Lincoln.

Rep. Phil Weaver (R-Neb.) during a recent Lincoln meeting, reported at that time that the missiles might be placed horizontally for storing and that some type of "hardening" covers for protection against damage was the subject of defense experiments.

It's Official: Atlas Base for Lincoln

World-Herald Washington Bureau,
1320-22 National Press Building.

The Air Force Monday officially designated the area of Lincoln, as the site for an intercontinental ballistic missile base.

The announcement confirmed a story in The Sunday World-Herald March 8.

Senator Roman Hruska and Representative Phil Weaver said they were advised by the Department of Defense that the Air Force has added Lincoln to its request for authorization to start construction during the fiscal year starting July 1.

The Senate Armed Services Committee is scheduled to begin hearings on a military construction authorization bill today.

Degree of 'Hardening' at LAFB Disputed

Missile Sites to Be Reinforced

By Gordon White

San Diego, California—Convair missile engineers here are finishing plans for crash construction of slightly reinforced Atlas missile launch sites at Lincoln Air Force Base.

In order to get U.S. missiles ready to go as quickly as possible, the first 4 Atlas squadrons, at Offutt, Warren, Vandenberg and Fairchild Air Force Bases are being put on "soft" unprotected launching pads.

Five other Atlas squadrons at Lincoln, Warren, Forbes, Schilling, and two still 'secret locations' will go into concrete surface bunkers, but will not be fully hardened.

Construction Longer

Soft bases will begin to become operational this summer. Fully hard bases will take nearly 3 years to complete.

The degree of reinforcement is of major importance in determining the vulnerability of the bases to enemy attack, and the number of nuclear warheads required to destroy them.

Strategic Air Command Head Gen. Thomas Power has said hardening carried top priority. Congressional and Pentagon sources say bases for Titan and 3rd-generation Atlases will be built as hard as modern construction can make them.

Rep. Phil Weaver (R-Neb.) said Friday in Washington that the Lincoln Atlas site would be "hardened" to withstand 100 pounds blast over pressure.

Sources within the Pentagon considered wholly reliable continued to maintain that only 25 pound reinforcement was planned for Lincoln.

Missile Model T

Contributing to the decision not to build completely hard bases for the first 9 Atlas squadrons is the fact that the Atlas is a missile Model T. Members of Congress are indicating a reluctance to put out the additional money because of a feeling that the Atlas may be replaced within 5 years.

Most Pentagon sources, however, expect the Atlas to be produced in limited numbers

but to be useful even after smaller, more advanced weapons are developed. Payload of the Atlas will be more than 4 times that of the solid-fuel minuteman, latest announced U.S. ICBM.

Atlases to be based at Offutt and the 3 other early sites will be almost totally in the open. Each squadron will have 3 launching pads.

LAFB More Advanced

Offutt's missiles will be vulnerable to blast over-pressures as low as two pounds per square inch, and can be knocked out by H-bomb hits more than 12 miles away.

Slightly more advanced missiles will be based at Lincoln. Elimination of radio guidance will allow more hardening, since there will be no vulnerable antennae above ground.

Each missile will be kept in its own launcher at single, widely-dispersed sites, roughly encircling Lincoln AFB.

Each Atlas will be stored in a horizontal position in steel and concrete, bathtub-shaped enclosures. Steel gantries will raise them to firing position within 30 seconds.

Lincoln Atlas sites will be able to withstand 25 pounds per sq. in. blast pressures, from a miss as close as 2 miles except during launch operations.

Truly hard bases to be built

later on for Titans and more advanced Atlases will be deep concrete silos.

Accuracy of existing ICBMS is one of the chief factors in hardening plans according to Air Force sources, only one in 4 early U.S. missiles will be able to hit within a 30 mile circle at full 6,300 mile range.

American intelligence sources estimate Soviet missiles are even less accurate. Facing such poor aim, 100 PSI hardening is not yet necessary, according to U.S. Defense officials.

By placing missile sites far enough from each other to assure that a single hit could destroy only one launcher, the number of ICBMS required to wipe out a hardened squadron mounts into the hundreds. An aggressor would have to face an H-bomb blow against his un-hardened cities for every U.S. ICBM he missed.

U.S. scientists are working toward hitting a 10 mile circle with 35% of the missiles fired. (Another 35% would hit within 20 miles of the target). Similar progress is expected in the U.S.S.R.

As missile accuracy increases, later bases will have to be hardened more, to reduce the danger of destruction of U.S. retaliatory weapons on the ground in the first wave of a nuclear attack.

OMAHA DISTRICT
WORLD HERALD, OMAHA, NEBR.
29 April 1959

Lincoln Atlas Site Strong

Will Be Tough Enough for Nearby H-Bomb

World-Herald Washington Bureau,
1220-23 National Press Building.

The Lincoln Air Force Base is to be the first Atlas-launching site in the country fully-hardened against enemy missiles.

That was the picture Wednesday, based on the unofficial—but accurate—word that Lincoln is scheduled to be the first Atlas base, plus the testimony of Gen. Thomas S. Power, Commander-in-Chief of the Strategic Air Command, at Omaha.

The term 100-PSI means one hundred pounds to the square inch.

The Lincoln site will resist that much overpressure.

Can't Take Direct Hit

Describing a 100-PSI base, General Power recently told a House subcommittee:

"It will not withstand a direct hit by a hydrogen bomb. But being able to absorb a near-miss, you place a tremendous pressure on the aggressor."

The enemy, General Power went on, must plan many missiles against each missile site "to have a 90 per cent confidence factor that he will destroy it."

The Lincoln Air Force Base is among those that will be constructed in varying degrees of hardening—and 100-PSI is now the extreme, though tests, reportedly are being made for even harder configurations.

In a hardened configuration, like Lincoln's is to be, the facility is entirely underground.

The Air Force plans to spend \$34,800,000 on Lincoln in fiscal 1960, and construction is likely to be finished by late 1961.

OMAHA DISTRICT
LINCOLN EVENING JOURNAL, LINCOLN, NEBR.
17 April 1959

Atlas Bids Planned in October

For Lincoln Missile Site

A construction start of Lincoln's Atlas intercontinental ballistic missile site by December appeared probable as October was designed for the bid advertising time.

This pre-construction schedule was disclosed Friday in Washington as an Army Engineers spokesman said a di-

'Atlas Safety Factor Good'

Page 14

rective for the bid letting would be forwarded to the Omaha District Army Engineers office.

The spokesman said the Lincoln missile complex is part of a construction program by the Corps of Engineers for 9 new Air Force intercontinental ballistic missile sites during the 1959 calendar year.

Cost of construction of the 9, according to the Washington Army Engineers, will be about \$300 million. An estimated cost figure for the Lincoln ICBM site has been set at about \$35 million by Rep. Phil Weaver (R-Neb).

As yet, no announcement has been made of the specific sites at which the Lincoln Atlas will be located. It is understood the definite sites have not yet been chosen but will be announced first by the Department of Defense in Washington.

Col. Caples said construction work would begin at the 3rd Offutt area ICBM site at Missouri Valley next week. Work began this week at the other two sites — Mead and Arlington.

OMAHA DISTRICT
LINCOLN EVENING JOURNAL, LINCOLN, NEBR.
3 June 1959

14 Wednesday, June 3, 1959—P.M. Lincoln Evening Jou

Atlas' Feeding Bottle



FUEL FOR ATLAS MISSILE—Some 28,000 gallon liquid oxygen tanks like this one being lifted by a giant 150-ton railroad crane in the Cheyenne, Wyo., freight yards will be coming to the Lincoln area soon after the Atlas ICBM installation slated here is completed. Liquid oxygen is the major chemical used in making the fuel for the nuclear offensive weapons. It and other chemicals in other tanks are piped into the missile at the ICBM sites. These tanks are manufactured in Chicago and moved only by daylight on two flat cars.

One Atlas Site Near Beatrice

Part of the Atlas missile launching facilities announced earlier for the general Lincoln area will be constructed near Beatrice, it was disclosed Wednesday.

The district office of the U. S. Corps of Engineers in Omaha confirmed the location near Beatrice, according to

United Press International.

The site will be on a 16-acre plot on the Paul G. Claassen farm 3 miles south of Beatrice and 3 miles west of Highway 77.

Claassen told newsmen earlier he had been offered \$225 an acre for 16.14 acres of his farm. He said he had not signed and that military representatives had informed him he must accept that price, plus \$1,000 nuisance fee, or be subject to a condemnation action.

Drilling Tests

Routine well drilling to test geological properties of the land has been underway on the farm for some time.

The Air Force announced earlier in Washington that it planned to construct Atlas facilities in the Lincoln area.

Kimball, Too

The Air Force announced another Atlas site will be constructed 2½ miles southwest of Kimball in western Nebraska.

Art Hendrickson, editor and publisher of the Western Nebraska Observer, said the underground installation is part of a 9-site complex for Francis Warren Air Force Base in Cheyenne, Wyo.

The Kimball site will be constructed on a 20-acre plot which the government is purchasing from the A. Painter estate and it will consist of a single underground launching pad.

Kimball, in a booming oil area, is a town of 5,500. Its population has more than doubled since 1950, largely due to the expanding oil industry.

Hendrickson said Air Force officials have given no indication as to how many military personnel will be stationed at the site.

OMAHA DISTRICT
ORLD HERALD, OMAHA, NEBRASKA
11 June 1959

Engineers Seek Site at Beatrice for Atlas

The Omaha District office of Army Engineers Wednesday confirmed that land is being sought near Beatrice as a part of the Lincoln Air Force Base Atlas missile installation.

Farmer Paul Claassen of Beatrice earlier said he had been offered 225 dollars an acre for 16.14 acres of his farm.

Routine soil tests of the Claassen land have been going on some time.

Missile May Be Located In Any One of 13 Areas

★ ★ ★ ★ ★ ★ ★
Points Form Circle Around Lincoln

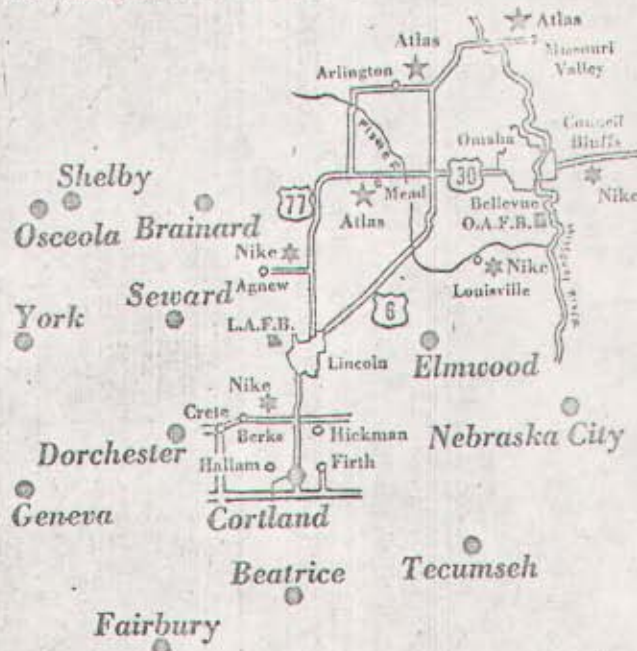
Launching sites of Lincoln's Atlas intercontinental ballistic missile complex could be located in any one of 13 areas which Strategic Air Command headquarters disclosed have been surveyed.

The surveyed areas announced by a SAC spokesman are in the vicinities of: York, Seward, Brainard, Elmwood, Nebraska City, Tecumseh, Cortland, Beatrice, Dorchester, Shelby, Osceola, Geneva and Fairbury.

These are the areas surveyed thus far by the Omaha District Office of the Army Engineers for us," the spokesman said.

"However, there is the possibility that more will be surveyed," he added.

It is believed the Cortland site is the same as earlier disclosed for the Fifth area, which is nearby.



SURVEY AREAS — Cities near which surveys have been made, according to SAC, for possible Atlas missile sites are in the larger, italics letters. Other offensive Atlas and defensive Nike sites, previously announced, also are shown.

The officially announced areas surveyed bears out earlier reports that Lincoln is to have a widely-dispersed Atlas missile system of some 9 sites with one missile each.

The pinpointed areas almost form a circle of some 50 or more mile radius from Lincoln and an inner one.

The SAC spokesman said final decision on the actual selection of the sites will be jointly made by SAC and the Air Force's ballistic missile division command.

However, a spokesman for the Army Engineers and the Air Force Installations Office in Omaha said it appears it will be late this year or early 1960 before authorization will be received to award contracts on the project.

Col. David Hammond of the Omaha Army Engineers said his office would have recommendations to do with the final decisions and would not announce any of the choices.

He said they expected to be through with their work in two or 3 more weeks. Their results are given to SAC and the AF ballistic missile division command.

He explained that most of the sites studied involved anywhere from 12 to 20 acres.

Surveyors drilled and took samples on the Walt Bogenreif farm 4 miles east of Eagle and 1/2 mile north in the Elmwood area. Bogenreif said surveyors have been working

Missile Site Surveys Involve Drilling 200 Feet to Hard Rock

By Bill Hinel
Southeast Nebraska Writer
Beatrice—What does an on-the-site survey for possible missile installation involve?

John Flaherty of Ft. Pierre, S.D., drilling on the Paul G. Claassen farm southwest of here, said holes are being drilled to hard rock, 200 feet down.

Reason for the holes, he said, is to obtain soil samples to determine the ground structure for construction purposes.

Other members of the test crew are Kenneth Palmer, inspector; and Lloyd Fulsos and Wayne Winchell, helpers, all of Ft. Pierre.

Surveys are under the direction of the District Army Engineers of Omaha.

Cable Rig

The crew is operating a medium-sized cable rig, commonly used for digging water wells. Palmer said the holes are cased to their full depth to keep out water.

Claassen and his wife say they are not happy about the idea of possibly giving up 16 acres of their 400-acre farm for a missile site.

Claassen said, his main objection was the quoted offer of \$225 per acre for his land by the Corps of Engineers and the fact that officials won't talk about what they intend to do with the land.

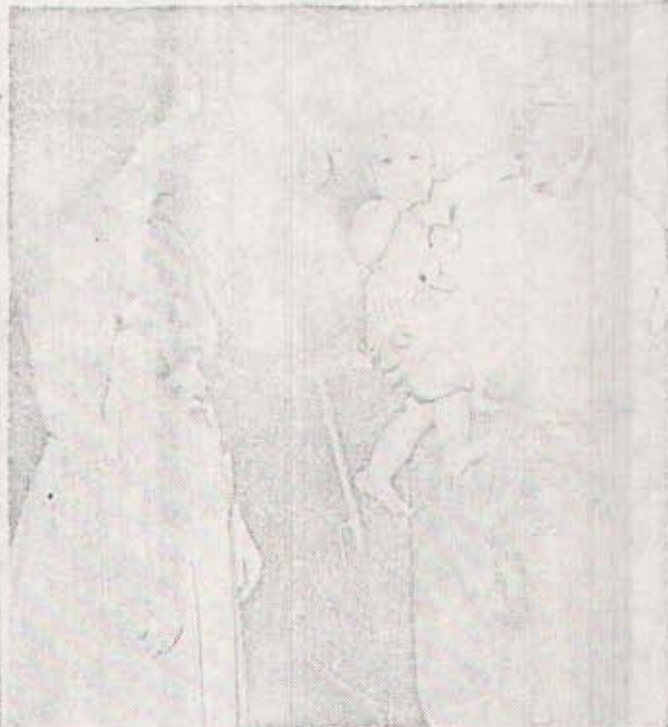
The plot of ground requested by the Engineers is about the only piece of level ground on the Claassen farm and is used for a corn field, he said.

Not Irrigated

The farm operated by Claassen is not irrigated and is fairly rolling. The Claassens also operate a Grade A dairy. The farm has been in the Claassen family about 50 years, with land in the area generally bringing about \$300-\$400 an acre.

Claassen said he feels that the \$225 offered is too low, especially considering its location in the middle of his farm.

He indicated that he will not sign the papers left him approving the sale. And govern-



MISSILE ON THEIR FARM? — Mr. and Mrs. Paul Claassen of Beatrice live on a farm which he says has been surveyed by Army Engineers in connection with their search for sites for missiles.

ing will be used if necessary, he said.

Activity in other areas, as 13 sites are surveyed leading to the installation of 9 Atlas Intercontinental Ballistic Missiles:

Other Areas Being Surveyed

Surveying took place on the W. E. Wade farm two miles west and south of Dorchester.

Engineers recently surveyed the Al Yungdahl farm 11 miles west and one mile north of Osceola. Lungdahl said the non-irrigated tract is "high ground."

Soil samples were taken and land was surveyed near Shelby on farm land owned by Lloy Scow, Dave Scow, Ed Scow and Mark Alt. Most of the land is flat according to residents.

A Seward spokesman said Army Engineers have been in that area surveying land 3½ miles west of Seward and two miles north of Highway 34. The land is farmed by Fay and Burdett Watson.

OMAHA DISTRICT
LINCOLN JOURNAL, LINCOLN, NEBR.
1 July 1959

Actual Sites Not Yet Picked

Special to The Journal
Washington—Rep. Phil Weaver (R-Ist) said the Air Force told him Wednesday it had not yet made final selections of any of the 9 sites for the Lincoln Atlas missile facilities.

costs will only about the 600 million figure originally requested.

Col. Leonhard indicated in his testimony that underground Atlas facilities were now being programmed by the Air Force to cost \$42.8 million.

The Air Force missile man, however, had earlier indicated that costs for the Atlas silo launchers would be in the "same ballpark" as the costs for the Titan silo launchers.

Col. Leonhard estimated the costs for 4 Titan missile squadrons as running around 225 million, or 56 million per squadron.

The military construction bill now up for final congressional approval contains a \$400 million figure for missile bases.

Exact amounts were classified but it was known that funds for the Lincoln complex were included in the lump sum for fiscal year 1959.

In other developments, according to the Air Force, "soft" launchers, of the type being built at Offutt, would be destroyed by only 2 psi pressure.

This means that the Offutt missiles could be knocked out by a 10 megaton weapon which missed its target more than a dozen miles.

The 25 psi "semi-hard" launchers originally planned for Lincoln would have been less vulnerable. But a 10 megaton head, landing closer than 5 miles, would have destroyed them.

The "silo" type launchers, now being considered for Lincoln, could withstand a hydrogen warhead hit less than 3,000 yards away.

The Air Force listed 9 individual, 12 acre lots as "procured in 1959" for the Lincoln base complex.

Precise locations were not given, but testimony indicated that no two launchers would be spaced closer than 13 miles apart, the estimated blast radius of the Soviet missile.

The committee was told that the U.S. planners were thinking of a missile force of 300 to 500 ICBMs.

Early facilities at Offutt, Vandenberg AFB, Calif., and Warren AFB, Wyo. are "soft" because of the necessity to get a U.S. missile capability operational at the earliest possible date.

The testimony for the committee also revealed that contracts at Lincoln were expected to be signed early in January, 1959.

OMAHA DISTRICT
LINCOLN JOURNAL, LINCOLN, NEBR.
1 July 1959

Could Withstand Relatively Close Megaton Blasts

'Hardened' Launchers Set for Area Missiles

By Gordon E. White
and David Burnham

Washington — Air Force engineers are designing underground "silos" for the Atlas intercontinental ballistic missile, slated for the Lincoln area.

Secret testimony released by the House Appropriations Committee contained detailed descriptions of the "hard-

ened" bases for the United States' ICBMs.

A Defense Dept. source reported swiftly changing technical concepts probably would dictate abandonment of the preliminary plans for the "horizontal bathtub" launchers originally scheduled for the Lincoln missiles.

Rep. Phil Weaver (R-1st),

a member of the House Appropriations Committee, several months ago, indicated, that the Lincoln facility would be built to withstand 100 pounds per square inch of pressure or a nuclear explosion and would involve the bathtub launchers.

During the hearing, however, Weaver asked Col. William Leonhard, of the Air

Force's ballistic missile Division, whether the design for the 100 psi Atlas launcher would use the horizontal or vertical facility.

Leonhard's answer: "It will be a silo."

The new configuration being considered for the Lincoln Atlas facility probably will mean total construction

Continued on Page 2

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LAFB Atlas Base Contracts Set Early In '60

Associated Press Special Service

Washington—The Air Force plans to let contracts for Atlas missile bases in Wyoming, Nebraska and Kansas between September and February.

The timetable was given to a closed session of a House Appropriations subcommittee by Col. William Leonhard of the Air Force Ballistic Missile Division.

Leonard's testimony, made public Wednesday, came in support of a request for a total of 140 million dollars to build the three missile squadrons.

"We expect to let contracts in September as soon as we get our 1960 appropriations for the squadron at Warren," Col. Leonhard said, "and . . . in January and February, respectively, for the Lincoln and Schilling installations."

The references were to Warren Air Force Base, Wyo., Lincoln AFB, Neb., and Schilling AFB, Kan.

Col. Leonhard said design is underway for all three of the installations.

The intention was to fund such projects on a priority basis but he gave no breakdown.

The overall estimates show

that about 38 miles of roads would be needed at Warren with a total cost of \$1,900,000; 22½ miles at Lincoln to cost \$1,125,000 and 75 miles at Schilling with a cost of \$3,750,000.

Col. Jackson said the ease of access to these launching areas is an important factor in site selection but such things as geological formations, availability of government-owned land and target coverage must be considered.

In response to a question by Chairman Harry R. Sheppard (D-Calif), he said these funds "substantially completes the Atlas program."

Missile Assembly Likely

But he estimated that about \$1 million each would be sought in the 1961 fiscal year program for such things as missile assembly at the Lincoln and Schilling bases.

The Air Force also sought \$4 million in the military con-

struction bill for the year which began Wednesday to get a program underway that will improve local roads between adequate highways and on-base roads at missile sites.

Col. E. R. Jackson of the Air Force Civil Engineering Office told the subcommittee

OMAHA DISTRICT
NONPARIEL, COUNCIL BLUFFS, IA.
14 July 1959

To Build Atlas Base At Lincoln

OMAHA — An Atlas Intercontinental Ballistic Missile complex will be constructed near Lincoln, Neb., the Air Force announced Tuesday.

Col. James S. Caples, Air Force Regional Engineer, said it will be the eighth Atlas squadron in the U.S. It will consist of nine launchers generally grouped in a circular fashion around Lincoln 20 to 30 miles from the center of the city.

Construction is scheduled to begin the first part of 1960. Design and construction will be carried out by the Omaha District Army

OMAHA DISTRICT
LINCOLN STAR, LINCOLN, NEBR.
2 July 1959

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26 The Lincoln Star Thursday, July 16, 1959

Bids On 9 Atlas Sites Out By First Of Year

Bids on construction of 9 Atlas ICBM sites around Lincoln are expected to be awarded in "December or January," according to Col. J. S. Caples of Omaha, U.S. Air Force Regional Civil Engineer.

Meanwhile, land appraisal

by Omaha District Army Engineers continues in 13 areas forming an "oval" around the capital city, in which the 9 sites eventually will be constructed.

Bids In September

He said advertisement of bids would probably begin in

September and actual construction could begin immediately after the bids were awarded in December.

It was earlier reported that the Engineers would begin negotiations in two weeks for land on which to construct the sites.

Col. Caples told the Star it was "too early to say when actual negotiation for land for the sites would begin" and that "appraisal work would have to be completed first."

The "oval" around Lincoln, of areas now being studied, Col. Caples said, reaches 30 miles north to Brainard, south near Beatrice, west as far as Seward and to a point east of Lincoln about 20 miles.

Col. Caples said selection and purchase of land for the 9 launching sites would have to be approved by the House Armed Services Committee and Congress and that the official announcement of the purchase of the sites would most likely come through the office of Nebraska Congressman Phil Weaver.

Maximum 20 Acres

The Atlas sites, the maximum size of which, in any one area is 20 acres, will be identical to the Atlas Missile complex at Forbes Air Force Base, Topeka, Kan.

The missiles, to be stored in underground "silos" will be on "semi-hard" launchers buried flush with the ground.

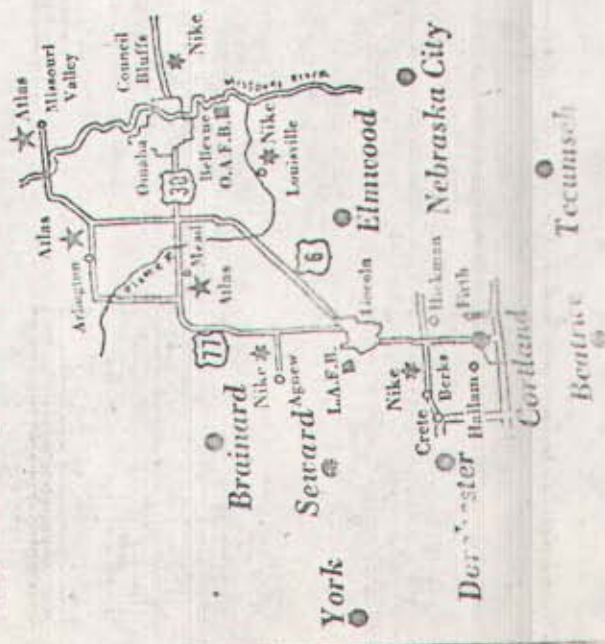
It has been estimated that an Atlas intercontinental ballistic missile could be fired from Lincoln to Moscow, a distance of 5,250 miles, in 30 minutes.

About 700 personnel, quartered at Lincoln Air Force Base, are expected to be needed to man the 9 launchers.

Structural construction costs of the Lincoln Atlas complex, Col. Caples said, would be roughly in the neighborhood of those of the Topeka complex, for contracts for which, total \$20 million.

Work May Start in January

By Dave Burnham
 Washington—The Air Force has announced the 9 specific locations for the Atlas intercontinental ballistic missiles to be based in the Lincoln area.
 The missile sites location They will be in the areas of announcement by the Air Force came through Rep. Phil Weaver (R-1st), who is a member of the House Defense Appropriations subcommittee.
 These are among the pre-announced.



MISSILE SITES—The sites marked by large blank dots will be sites for Lincoln's Atlas missile bases. Rep. Phil Weaver announced.

The congressman said the Air Force hopes to begin actual construction work by Jan. 1 and expects the installation to be completed in about 16 months.
 It is understood that the Air Force may begin grading work this fall.
 (In Nebraska, Col. James Caples of Omaha, Air Force installations officer, said bids for construction of the 9 site installation will be advertised in October and opened 30 days later.)

(He explained bids must await completion of the missile complex design, which is being executed by the Air Force's Ballistic Missile Division in Los Angeles.)

"I've no information on what type of missile the Lincoln Atlas base will have until I'm told," Col. Caples said. However, an early July report in Washington repeated Rep. Weaver's conversation with Col. William Leonard of the Air Force's Ballistic Missile Division in which the latter told Weaver "Lincoln will be a silo type Atlas installation."

Weaver had asked Leonard whether the design for the 100 psi installation (100 pounds per square inch of pressure or a nuclear explosion) would use the horizontal "battling" or the vertical "silo" facility.

\$35 Million

The Nebraska lawmaker said total construction cost for the 9 site Atlas missile facility is expected to total approximately \$35 million.

The 16-month building period required for the facility is understood to be necessary because of the large amount of highly complicated technical equipment needed to launch the ocean-spanning nuclear war head carrying weapon.

The Air Force said approval for the land acquisition was obtained in "our fiscal 1959 military construction program."

An Omaha Army Engineers spokesman said Wednesday that Col. Caples has authorized the Engineers' real estate department to go ahead and negotiate for sale of the land.

(It will be another week or two before this land acquisition begins, the Engineers spokesman said.)

With construction not to begin until January, it was believed all crops now on the involved acreage of the 9 sites would be harvested.

The sites, ranging from 22 to 54 miles from Lincoln Air Force Base, will be about 12 acres each.

Army engineers in Omaha said it would not be known for several weeks what specific farms would be involved.

Description of the missile sites as announced by Rep. Weaver follows:

One half mile north of Highway 34, 24.5 miles east of the Lincoln AFB (Elmwood area).

The south side of Route 2E, or 51.5 miles southeast of the Lincoln AFB. (Nebraska City).

The west side of Route 50, or 54.5 miles southeast of the Lincoln AFB. (Tecumseh).

Four miles east of Courtland, or 30 miles south of Lincoln AFB. (Courtland area)

Five miles southwest of Beatrice, or 52 miles south of the Lincoln AFB. (Beatrice area).

Three miles south of Dorchester, or 35 miles southwest of the Lincoln AFB. (Dorchester area).

The north side of Route 50, or 50½ miles west of the Lincoln AFB. (York area).

Five miles west of Seward, or 25 miles northwest of the Lincoln AFB. (Seward area).

The north side of Route 30A, or 46½ miles northwest of the Lincoln AFB. (Brainard area).

Counties involved are Cass, Otoe, Johnson, Saline, York, Seward, Butler and Gage.

Lincoln Journal
 and Nebr. State Journal
 29 July 1959

OMAHA DISTRICT
SIOUX CITY JOURNAL, SIOUX CITY, IA.
30 July 1959

Announce Sites for Missiles Around Lincoln

WASHINGTON (AP) — The airforce has listed nine Atlas launching sites, ranging from 22 to 54 miles from the Lincoln airforce base in Nebraska.

The sites were listed as follows:

One half mile north of highway 34-24, or five miles east of the Lincoln A. F. B.

The south side of route 23, or 51½ miles southeast of Lincoln.

The west side of route 50, or 54½ miles southeast of the Lincoln, A. F. B.

Four miles east of Cortland, or 30 miles south of Lincoln.

Five miles southwest of Beatrice, or 52 miles south of Lincoln.

Three miles south of Dorchester, or 35 miles southwest of Lincoln.

The north side of route 50, or 50½ miles west of Lincoln.

Five miles west of Seward, or 25 miles northwest of Lincoln.

The north side of route 3a, or 46½ miles northwest of Lincoln.

The sites are expected to average about 12 acres each.

No Tipping, but . . .

OMAHA DISTRICT
WORLD HERALD, OMAHA, NEBRASKA
29 July 1959

A.F. Selects 9 Atlas Sites

Lincoln Base Support Point for Missiles

Atlas flight from Florida success. Story on Page 3.

By John Jarrell

World-Herald Washington Bureau,
1220-22 National Press Building

The Air Force announced Wednesday the location of nine Atlas launching sites around Lincoln.

Members of the Nebraska Congressional delegation were informed that the Atlas sites would be in Cass, Otoe, Johnson, Saline, York, Seward, Butler and Gage Counties, with two in the latter.

The Gage County sites will be situated five miles southwest of Beatrice and four miles east of Cortland. In Saline County the site will be three miles south of Dorchester and in Seward County five miles west of Seward.

The Cass County site will be one-half mile north of Highway 34 and 24.5 miles east of the Lincoln Air Force Base, the support facility.

Otoe's will be on the south side of Route 2-E, 51.5 miles east-southeast of Lincoln. The Johnson County plot will be on the west side of Route 50, 54.5 miles southeast of Lincoln.

The York County site will be on the north side of Route 50, 50.5 miles west of Lincoln. The Butler County spot will be on the north side of Route 30-A, 46.5 miles northwest of Lincoln.

The Lincoln Atlas project will employ the "unitary" concept, in which one missile is located on each site. This contrasts with the Omaha installation, in which three "birds" are located on each complex.

9 Atlas Missile Sites Revealed

... 22 To 54 Miles From LAFB

By George Moyer
 Air Force officials in Washington revealed the sites for 9 Atlas Intercontinental Ballistics Missile installations in the Lincoln area to Nebraska's congressional delegation. Two of the bases will be in Gage County, one each in

Otoe, Cass, Johnson, Saline, York, Seward and Butler Counties.

The Air Force announcement of the location of the missile sites came through Rep. Phil Weaver (Rep. 1st), member of the House Defense Appropriations Subcommittee. The sites will range from 22 to 54 miles from the Lincoln Air Force Base.

Money Appropriated

Money has already been appropriated for construction of the Atlas launching sites, but no land has been acquired yet. Air Force officials in Omaha said that negotiations for the 10 to 12-acre areas needed for each site would begin immediately.

Bids for construction work will be advertised in October and opened 30 days afterward. "Contractors will move in within a very short time after the contracts are approved," according to Col. James Caples, Air Force Installations Officer at Omaha.

This means that construction could begin this year, Col. Caples said. Construction on the silo-type launchers and control room blockhouses is expected to take 16 months.

\$35 Million

Some 540 workers will be engaged in the Lincoln area construction.

Total cost of the project is estimated at \$35 million.

Seven hundred airmen will be needed to man the Atlas

bases. The men will be housed at Lincoln AFB and will commute to their jobs at the missile sites, according to press dispatches.

Originally, 13 areas were under study by Omaha District Corps of Engineers as possible Atlas sites. Dropped were Geneva, Fairbury, Osceola and Shelby areas.

Land purchased and prices may be known in a week, according to Corps of Engineers spokesmen.

The Sites

Description of the missile sites announced by the Air Force through Rep. Weaver:

One half mile north of Highway 34, 24.5 miles east of LAFB in Cass County.

South side of Rt. 2-E, 51.5 miles east of LAFB in Otoe County.

West side of Rt. 50, 54.5 miles southeast of LAFB in Johnson County.

Four miles east of Cortland, 30 miles south of LAFB in Gage County.

Five miles south of Beatrice, 32 miles south of LAFB in Gage County.

Three miles south of Dorchester, 35 miles south of LAFB in Saline County.

North side of Rt. 50, 50.5 miles west of LAFB in York County.

Five miles west of Seward, 25 miles northwest of LAFB in Seward County.

North side of Rt. 30-A, 30 miles northwest of LAFB in Butler County.



The large black dots represent sites for the Lincoln area Atlas missile complex. Rep. Phil Weaver announced Wednesday. The Atlas bases marked with stars belong to the Omaha complex already under contract.

Lincoln Evening Journal and Ne.

Missile Projects Chief Assigned

The U.S. Army Engineers' office at Lincoln Air Force Base will more than double its staff as this area's offensive and defensive missile construction program gets rolling.

Now assigned to supervise the Army Engineers responsibility in building the two Nike-Hercules sites and the 9 Atlas intercontinental ballistic Missile sites is Maj. Lester J. Henderson.

The Army major's current title of resident engineer will change to area engineer as the Atlas complex construction begins early next spring. By that date, the Lincoln Army Engineers personnel of 20 will be almost doubled, according to Ed Thurber, assistant to Maj. Henderson.

The Army officer's immediate job will be the supervision of the construction of Nike sites at Agnew and Berks.

Beacon Construction Co. of Boston, awarded contracts for both the Omaha and Lincoln Nike projects, has begun work in the Omaha area. Thurber, resident engineer until Maj. Henderson's arrival, said Beacon representatives should be in Lincoln soon to set up construction equipment for the job here.

Maj. Henderson will be responsible for Army Engineer liaison with the firms awarded the Atlas construction job in early 1960.



Maj. Henderson and Asst. Thurber study Nike plans.

OMAHA DISTRICT
NONPARIEL, COUNCIL BLUFFS, IA.
28 October 1959

\$31,900,000 For Atlas At Lincoln

WASHINGTON (AP) — The Air Force has released \$31,900,000 for construction of various facilities in connection with an Atlas missile base at Lincoln, Neb.

Construction will include:

Communications support facility, missile assembly building, missile storage facility, missile launching stations, and re-entry vehicle facility.

Over-all estimated cost of the base, including construction and the missiles, is around 83 million dollars.

OMAHA DISTRICT
WORLD HERALD, OMAHA, NEBR.
9 October 1959

Atlas Employes to Need Houses

Lincoln (AP)—Employes at the three Atlas missile sites around Lincoln will bring a peak one million dollars monthly pay roll to the area, the Lincoln Board of Realtors has been told.

Larry M. Failor, director of industrial relations for Convair-Astronautics, said 17 to 18 hundred workers will be looking for housing in either Lincoln or Fremont.

"Many will want to purchase a home for the 2½ or three years required to complete electronics work," he said.

The influx is expected to start next June. The sites are near Lincoln, Fremont and Mead.

OMAHA DISTRICT
LINCOLN JOURNAL, LINCOLN, NEBR.
16 October 1959

Atlas Roads on Bid Basis

*All Will Be
Hard-Surfaced*

Continued From Page 1

20 acres in size, according to Caples) will be owned, built and maintained by the federal government. These roads will not be accessible to the public.

Fences

Sites are to be surrounded by man-proof fences for safety and security reasons.

In some cases, a road must be built from the launcher site to an existing public road (Federal, state or county).

The Defense Dept. starts the ball rolling on the process of building these access roads.

Engineering Study

The Defense Dept., with the state involved, undertakes an engineering study to determine road requirements and cost.

Funds are then transferred from the Defense Dept. to the Bureau of Public Roads, which in turn transfers them to the state. The state may then transfer funds to the county involved.

Private contractors will build the access roads on a bid basis. Contracts may be let by the county.

Hard-Surfaced

The 7.6 miles of these access roads involved in the Lincoln concentration would all be hard-surfaced.

Caples said maintenance is usually carried on by the county in an agreement with the Air Force command involved. In this case it would be Lincoln Air Force Base.

In some cases, existing roads are satisfactory or need only to be improved.

'Few Men'

Traffic on the access roads, and on existing roads leading to sites, will not be great, according to Caples. It will consist, he said, of "a few men changing shifts each day."

AF Officer Says 7.6 Miles to Be Built

Atlas Access Roads to Be Short

By Ron Gibson
Access roads to the 9 Air Force Atlas ICBM sites surrounding Lincoln will be short, comparatively unobtrusive and probably available to the public.

James F. Caples, USAF operations officer in Omaha, outlined the procedure

whereby the federal government-financed roads will be built in co-operation with the state and county government.

7.6 Miles

Strategic Air Command headquarters at Offutt AFB confirmed the access road construction will involve only 7.6 miles of road-building.

Some of the 9 sites previously announced are presumably close to existing roads.

Sites have been announced in the areas of Nebraska City, Beatrice, York, Seward, Tecumseh, Brainard, Dorchester, Cortland Elmwood.

Continued on Page 12

Land-owners whose property will be cut by the new access roads will have full use of them, it was stated. Cattle crossings will be provided if necessary.

Easements are obtained on land surrounding the missile sites, permitting use of the land for agriculture but not for human habitation.

"The idea," Caples said, "is to disturb the owner's property as little as possible."

All will be controlled by Lincoln Air Force Base.

\$31.9 Million for Construction

Lincoln Missile Site Funds Allotted

By Bess Jenkins

A \$31.9 million sum from the USAF military construction budget in Washington gives the green light to Lincoln's 9-site Atlas missile system construction.

Over-all estimated cost of the base, including construction and the missiles, is around \$88 million.

The announcement, made by Rep. Phil Weaver (R-Neb) means:

—Bids will be invited in early December for the "brick and mortar" facilities construction at the 9 sites and at Lincoln Air Force Base.

—Omaha Army Corps of Engineers, builders of the Atlas system's basic structures, will open bids 30 days later for this work.

—Construction, normally initiated within 10 days after a contract is signed, may get under way sometime in January.

Normally the system is completed in a year or less. This will open the way for installation of technical facilities and equipment, a job for the Air Force and Convair-Astronautics.

Cortland, Beatrice, Tecumseh, Nebraska City and Elmwood. Slated for building on LAFB proper are:

—A communication support facility (telephone switchboard).

—An assembly building where the missiles will be assembled, disassembled and checked out.

—A missile storage facility

near the assembly structure where component parts will be stored before assembly and after being disassembled.

—A storage facility in the northwest area of LAFB's present ammunition storage building where the missile nosecones or the re-entry vehicle of the missile will be stored.

Col. Caples said each

launching site would include two basic structures — the operations and control building and the launching facility.

The Omaha colonel disclosed bids also will be taken in November for a \$25 million Titan base at Ellsworth Air Force Base at Rapid City, S.D. This will be a 3-site complex with 3 missiles at each site.

700 Bidders

As many as 700 contractors, including those on subcontract job programs, can be expected to bid on the project, according to Col. James Caples of Omaha, USAF installations officer.

Col. Caples said design of the Lincoln Atlas complex still is not ready for release, nor is the farm land involved in the site.

However, Col. Vernon Hastings of the Air Force Ballistic Missile Division earlier said Lincoln's missile base would be hardened and "much like the Titan." The Titan, now being built at Lowry, Colo., is the most hardened missile complex yet developed.

Soft Base

Col. Hastings now is stationed at Mead as project officer for the "soft" Omaha Atlas Base's 3 sites and will be in charge of the Lincoln program.

Construction with the \$31.9 million will be done at both Lincoln Air Force Base and at the 9 widely dispersed launching sites at Brainard, Seward, York, Dorchester,

Note

OMAHA DISTRICT
WYOMING EAGLE, CHEYENNE, WYO.
12 December 1959

LINCOLN ATLAS BASE HELD UP

LINCOLN (UPI)—Construction of an Atlas intercontinental ballistic missile base in the Lincoln area will be delayed until next spring to permit changes in design.

Col. James Caples, Air Force engineering chief for the Missouri River division, announced the change in design and construction schedule.

It had been announced earlier that bids construction of the Atlas base would be asked early in December, and that contracts would be let in January.

OMAHA DISTRICT
WORLD HERALD, OMAHA, NEBR.
28 October 1959

31.9 Million to Lincoln Atlas Base

Work Will Start in December

By John Jarrell

World-Herald Washington Bureau,
1220-22 National Press Building.

Construction money for the Atlas missile launching sites connected with the Lincoln Air Force Base became available Wednesday.

The Air Force told Nebraska Congressional offices that \$31,900,000 was being released for the Lincoln missile base, under the military construction program.

Over-all estimated cost of the base, including construction and the missiles, was given as around 88 million dollars.

Warheads Storage

Among purposes for which the funds are to be spent is a "re-entry vehicle facility."

The Air Force, after consultation at the Pentagon, said this meant "a building where nose cones are received, stored and maintained."

This obviously means the storage place for nuclear warheads.

Other facilities listed for construction include a missile assembly building, communications support, missile storage, missile launching stations and utilities.

Nine Launching Sites

Nine launching sites are to be constructed around the Lincoln base.

Actual construction, the air force said, will begin in December.

The re-entry vehicle storage facility was described as a "kind of a secure area where is stored what goes up in the business end of the missile."

The Lincoln complexes will be "semi-hard" in that they will be protected from the blast of retaliatory missiles but the degree of hardness was not revealed.

The Air Force also revealed these fund allocations:

Beale Air Force Base, Cal.

—Titan base 43 million dollars for ammunition storage, missile assembly building, missile storage facility, missile launching complex.

Mountain Home AFB, Idaho

—Titan base, \$43,000,000 for air field approach lighting, missile storage facility, missile assembly building, missile launching complex, and road.

Cannon Air Force Base,

N. M. — Four hundred thousand dollars for construction of an aircraft engine inspection and repair shop.

Same Amount for Schilling

The release of an identical \$31,900,000 for construction of Atlas facilities based on Schilling Air Force Base at Salina, Kans., also was announced Wednesday by the Air Force.

Like Lincoln, the Kansas job will consist of nine individual sites.

OMAHA DISTRICT
LINCOLN JOURNAL, LINCOLN, NEBR.
29 December 1959

Lincoln May Get Silo Launchers For Atlas Sites

By Gordon White

Washington—A revision of the Atlas ICBM program is "in the works" and may bring silo-type launchers to the Lincoln area, according to Air Research and Development Command officers.

"Silos" would add up to \$40-million to the construction costs, Pentagon officials estimated.

The latest over-all estimated cost of the base, including construction and missiles, was around \$88-million. Thus, adding silos would bring the estimated cost to \$128-million.

It was indicated that a broad program change probably would involve a considerable increase in "hardening" of all Atlas missile sites still to be built.

The switch was explained here as the cause of the temporary hold-up in start of construction on the Lincoln ICBM sites.

At the same time, an Army Corps of Engineers official revealed that the Air Force was pressing for new speed-ups in work on early Atlas launchers such as those going into the facility at Offutt AFB.

Although present target date for completion of heavy work at Offutt is Feb. 25, the Corps spokesman said: "That isn't soon enough for the ballistics missile division."

In Washington, a spokesman for Sen. Stuart Symington (D-Mo) called the Offutt type Atlases "already obsolescent," and described the proposed harder Lincoln installations as better long-term deterrent weapons.

The engineers said that plans for the Lincoln base were still in the hands of the Air Force at San Diego.

"We expect to get them about March or April," the spokesman said. "I would call it probable that Lincoln would get 'silo' type launchers," he added.

Present plans for the 9 Lincoln sites call for "bathtub" launchers sunk below ground level and hardened to take 25 pound blast overpressures from near misses.

"Silos" could take between 100 and 200 pound overpressures, and survive much closer hits.

\$31.9 Million for

Lincoln

By Bess Jenkins

A \$31.9 million sum from the USAF military construction budget in Washington gives the green light to Lincoln's 9-site Atlas missile system construction.

Over-all estimated cost of the base, including construction and the missiles, is around \$88 million.

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—Omaha Army Corps of Engineers, builders of the Atlas system's basic structure, will open bids 30 days for this work.

—Construction, initiated within 10 days a contract is signed, is under way somewhere secondary.

Normally the system is completed in a year. This will open the way for installation of technical equipment and equipment at the Air Force and Commandant's nautics.

OMAHA DISTRICT
LINCOLN JOURNAL, LINCOLN, NEBR.
7 January 1960

Road Bids Revealed

For Alert Facility Here

General Concrete Co. of Lincoln, submitting a \$203,740 figure, is apparent low bidder to construct the new perimeter and access road to Lincoln Air Force Base's new alert facility.

The Omaha District office of the Army Engineers said a contract will be awarded in the next two weeks after the two submitted bids are reviewed.

The second bidder was Roberts Co., also of Lincoln. Its bid was \$211,437.

Government cost estimate was \$154,518, an Engineers spokesman said.

The job includes a perimeter and access road, fencing, lighting and a security gatehouse in the alert facility area.

The crew readiness or alert facility is scheduled for completion in late March.

OMAHA DISTRICT
LINCOLN JOURNAL, LINCOLN, NEBR.
7 January 1960

Contracts Revealed

For 'Silo' Type Atlas Launching

By Gordon White

Washington — Missiles contracts for a deep "silo" type underground launch site for Atlas ICBMs were revealed here by the Army Corps of Engineers.

The Corps, construction agent for the Air Force missile bases program, said it has awarded contracts totaling \$2,292,262 to the Bechtel Corp. for the "silo launch test facility," to be built at Vandenberg Air Force Base, Calif.

Prototype

Corps of Engineers sources here described the silo unit as a prototype for operational Atlas missile bases yet to be built, including the 9-missile Lincoln base due to be started this spring.

A Corps of Engineers spokesman estimated that Lincoln plans would not be finished by the Air Force Ballistic Missiles division until March.

The silo, or "hardened" launcher, would make Atlas sites much less vulnerable to enemy attack. So far in the Atlas program, all launchers, including those being built in the vicinity of Offutt AFB, have been "soft" or unprotected.

First plans for the Lincoln base would have hardened it to take 25 pounds overpressure.

9 Atlas Silo Plans Ready

Details Completed for Lincoln Area

Lincoln (AP) — The nine Atlas intercontinental ballistic missile launchers to be built around Lincoln are to be placed in 180-foot deep silos, according to Lieut. Col. Hal Schroeder, assistant deputy engineer of the Omaha District.

Colonel Schroeder made the announcement at a meeting of the Nebraska Chapter of the Associated General Contractors of America, which is holding its annual convention in Lincoln.

It was the first official pronouncement that the final plans for the bases had been settled. There previously had been speculation on what type of bases would be built because of a deferral of bidding on the bases five weeks ago.

Bids in Spring

"The missiles will be smack underground," Colonel Schroeder said. "The sites should look almost like a cornfield."

Bids are to be let in early spring, Colonel Schroeder said, but dates cannot yet be published.

The sites, surrounding the Lincoln Air Force Base, each will consist largely of "one big hole," Colonel Schroeder said.

The silos will be 50 feet in diameter, and the upper portions will be lined with nine feet of concrete.

The Atlas missile itself is 10 feet in diameter and 80 feet tall.

128 Million

Among installations to be built at the base are a guided missile assembly and test facility, liquid oxygen generating facility, liquid oxygen disposal unit and various communications facilities.

The launchers are to be located at Dorchester, Beatrice, Nebraska City, Seward, Tecumseh, Elmwood, York, Cortland and Brainard.

Total cost has been estimated at 88 million dollars, but recent speculation is that the underground silos would

OMAHA DISTRICT
NONPARIEL, COUNCIL BLUFFS, IOWA
14 January 1960

Deep Silos For Atlas Missiles

Bids In Spring On Lincoln Launchers

LINCOLN, Neb. (AP) — The nine Atlas intercontinental ballistic missile launchers to be built around Lincoln are to be placed in 180-foot deep silos, according to Lt. Col. Hal Schroeder, assistant deputy engineer of the Omaha District of the U.S. Army Corps of Engineers.

Lt. Col. Schroeder made the announcement at a meeting of the Nebraska Chapter of the Associated General Contractors of America, which is holding its annual convention in Lincoln.

It was the first official pronouncement that the final plans for the bases had been settled. There previously had been speculation on what type of bases would be built because of a deferral of bidding on the bases five weeks ago.

Like A Cornfield

"The missiles will be smack underground," Schroeder said. "The sites should look almost like a cornfield."

Bids are to be let in early spring, Col. Schroeder said, but dates cannot yet be announced.

The sites, which will be located in nine underground silos surrounding the Lincoln Air Force Base, will each consist largely of "one big hole," Col. Schroeder said.

The silo will be 50 feet in diameter, and the upper portions will be lined with 9 feet of concrete.

The Atlas missile itself is 10 feet in diameter and about 80 feet tall.

Base Installations

Among installations to be built at the base are a guided missile assembly and test facility, a liquid oxygen generating facility, a liquid oxygen disposal unit and various communications facilities.

The sites are to be located at Dorchester, Beatrice, Nebraska City, Seward, Tecumseh, Elmwood, York, Cortland and Brainard.

The total cost has been estimated at 33 million dollars, but recent speculation is that the underground silos would boost the cost to 123 million.

Lincoln Atlas Launchers Will Be Silo Type

A Dec. 29 report by The Lincoln Journal's Washington correspondent that Atlas inter-continental ballistics missile program revisions might result in silo-type launchers for the Lincoln missile system has been confirmed by an Omaha Army Engineer Corps official.

Lt. Col. Hal Schroeder, assistant deputy engineer for the Omaha District, speaking at an Associated General Contractors meeting, said the 9 Atlas missile sites scheduled for Lincoln will have the

underground or silo type launchers.

His statement was the first official announcement of the type scheduled for Lincoln. A Strategic Air Command spokesman said: "We have nothing to say at this time."

The switch was explained as the cause of the temporary hold-up in start of construction on Lincoln ICBM sites.

"Silos" will add up to \$40 million to the construction costs, Pentagon officials estimated earlier.

Over-all estimated cost of the base, including construc-

tion and missiles is now around \$128 million.

"The missiles will be smack underground," Col. Schroeder told the contractors at their 33rd annual convention here.

"The sites should look almost like a cornfield," he noted.

Tentative dates for bid-letting and bid-opening for the Lincoln complex were listed for early spring.

The "silos" will be 50 feet in diameter and 180 feet deep, Col. Schroeder explained. Upper portions of the silos will be lined with concrete some 9 feet thick.

Former plans for the 9 Lincoln sites called for "bathtub" launchers sunk below ground level and hardened to take 25 pound blast overpressures from near misses. "Silos" could take between

100 and 200 pound overpressures and survive much closer hits. Among installations which will be constructed at Lincoln Air Force Base itself, Col. Schroeder said, are a guided missile assembly and test facility, a liquid oxygen generating facility, a liquid oxygen disposal unit, and various communications facilities.

The Lincoln Journal
14 January 1960

50-Foot Diameter

The silos will be 50 feet in diameter and 180 feet deep, he said. Upper portions of the silos will be lined with concrete some 9 feet thick.

The Atlas missile itself is 10 feet in diameter and approximately 30 feet high.

Among installations which will be constructed at Lincoln Air Force Base itself, Col. Schroeder said, are a guided missile assembly and test facility, a liquid-oxygen generating facility, a liquid oxygen disposal unit, and various communications facilities.

The guided missile assembly and test facility will serve to "check out" the missiles to assure their proper operation, he said.

Lincoln's launcher sites are to be located at Dorchester, Beatrice, Nebraska City, Seward, Tecumseh, Elmwood, York, Cortland and Brainard.

Total cost of the complex was estimated at near \$88 million last October.

Cost May Be Up

However, it has been speculated that construction of underground silos would boost the cost by \$40 million—thus approaching a total bill of \$128 million.

Lincoln's Atlas bases previously were announced as "semi-hardened" launching pads, constructed with the tops of the launchers even with the ground.

Construction of the complex is expected to employ as many as 1,800 technical workers.

Some 700 Air Force personnel will man the missile base after it is activated.

It was the first official pronouncement that Lincoln sites would be "hardened" and followed 5 weeks of speculation triggered by a deferral of bidding on the ICBM bases.

"The missiles will be smack underground," Col. Schroeder told the contractors at their 33rd annual convention here.

"The sites should look almost like a cornfield," he noted.

Spring Bids

Tentative dates for bid-letting and bid-opening for the Lincoln complex were listed for early spring.

(Col. Schroeder placed a ban on publication of exact dates until they are definitely established.)

However, the colonel pointed out, Lincoln dates will "follow close behind" the opening of bids for an Atlas complex ringling Schilling Air Force Base at Salina, Kan.

Lincoln's Atlas launching sites, which will be located in 9 underground silos surrounding the Lincoln Air Force Base, will each consist largely of "one big hole," Col. Schroeder pointed out.

OMAHA DISTRICT

OMAHA WORLD HERALD, OMAHA, NEBRASKA
26 January 1960

Salina Atlas Base 'Hard'

May Be Design Hint for Lincoln Site

Air Force officials revealed Tuesday that the Salina, Kans., missile installation will be the nation's first "fully hardened" Atlas missile complex.

Col. James S. Caples, regional civil engineer, said at Omaha that the site will be completely buried to give it "a maximum protection against enemy attack."

The missiles will be stored vertically in underground silos. The control centers likewise will be subterranean structures.

The underground facility will resemble that for the Titan missile, which likewise is buried below ground. Other Atlas missile bases—including Omaha—are either above ground or "semi-hard" in that they are sunk flush with the ground.

The Salina announcement was seen as a hint of the type of design to be used for the Lincoln Atlas installation, on which bids will be opened in the spring.

The Lincoln project several weeks ago was delayed to permit further study into the degree of hardening to be employed.

Colonel Caples made his announcement to coincide with the issuance by the district Army Engineers of notices to prospective bidders on construction of the Salina Atlas project.

Bid opening will take place February 24.

4 New Atlas Sites Planned

The Strategic Air Command announced Tuesday afternoon additional Atlas missile launching facilities will be built in Oklahoma, Texas, New Mexico and Northern New York State.

This will bring to 11 the number of Atlas complexes and to 16 the number of intercontinental ballistic missiles bases of both the Atlas and the Titan types.

Designated Tuesday for Atlas facilities were:

Altus Air Force Base, Altus, Okla.; Dyess Air Force Base, Abilene, Tex.; Walker Air Force Base, Roswell, N. M., and Plattsburgh Air Force Base, Plattsburgh, N. Y.

SAC said nine launching pads will be constructed near each of the air bases. All of the bases are under SAC control.

Previously-announced Atlas bases are Offutt at Omaha; Lincoln; Forbes, Topeka, Kans.; Schilling, Salina, Kans.; Fairchild, Spokane, Wash.; Warren, Cheyenne, Wyo.; and Vandenberg, Santa Maria, Cal.

Titan bases have been announced for Lowry, Denver, Colo.; Ellsworth, Rapid City, S. D.; Beale, Marysville, Cal.; Mountain Home, Mountain Home, Idaho, and Larson, Moses Lake, Wash.

OMAHA DISTRICT
WYOMING EAGLE, CHEYENNE, WYO
15 January 1960

Lincoln Atlas Sites to Be Underground

LINCOLN (UPI) — Lincoln's nine Atlas intercontinental missile launching sites will be underground.

This was told to the Nebraska Chapter of Associated General Contractors Wednesday by Lt. Col. Hal Schroeder, assistant deputy engineer of the Omaha district of the Army Corps of Engineers.

It was the first official pronouncement that Lincoln sites would be underground after five weeks of speculation triggered by a deferral of bidding on the ICBM bases.

Schroeder told the contractors that the sites "should look almost like a cornfield." The tentative dates for bid letting for the Lincoln area were listed in early spring.

Lincoln's Atlas launching sites will be built underground all around the Lincoln Air Force Base. The cost has been estimated at nearly \$88 million. However, it is estimated that the underground construction will boost the cost by \$40 million.

OMAHA DISTRICT
WORLD HERALD, OMAHA, NEBR.
30 January 1960

Atlas Sites Start in April

Lincoln Installation Finish by June, '61

World-Herald Washington Bureau,
1220-22 National Press Building.

Construction is scheduled to start April 1 on underground Atlas launching sites at Lincoln Air Force Base. They will have maximum hardening, built to withstand one hundred pounds of pressure per square inch.

Members of the Nebraska Congressional delegation were informed Friday by Brig. Gen. Joseph T. Kingsley, Jr., that advertising for bids for the m a m o t h construction job will take place February 25, with the bids opened March 21.

Senator Carl Curtis, requesting further information of the Pentagon, was told that the construction is estimated at between 45 and 50 million dollars.

Representative Phil Weaver of Falls City said of the nine underground launching sites:

"The one hundred pounds per square inch construction, according to experts, is the maximum that would be feasible and justifiable to do the job."

Other sources said this degree of hardening would make it virtually impossible to destroy the sites except by direct hit of an atomic bomb.

OMAHA DISTRICT
LINCOLN STAR, LINCOLN, NEBR.
30 January 1960

ATLAS CONSTRUCTION STARTS HERE APRIL 1

Lincoln Star Special
Washington—The Air Force will start construction of 9 heavily protected Atlas missile sites in the Lincoln, Neb., area on April 1, Rep. Phil Weaver (R-Neb) disclosed late Friday.

The missile sites, to be protected at the rate of 100 pounds per square inch, will be in operation by June of next year, the congressman revealed.

Rep. Weaver said the construction schedule as of now is:

Feb. 4, 1960—Final engineering review.

Feb. 25, 1960—Bid advertising by Corps of Engineers.

March 21, 1960—Proposed

bid opening date.

April 1, 1960—Construction starts.

June, 1961—Beneficial occupancy date (this means operational missile on station).

Involved in the construction program is the procurement and installation of generators, missile elevators, propellant loading system, heating, ventilating and air conditioning equipment. The generators and elevators will be handled through the Kansas City office of the Corps of Engineers.

OMAHA DISTRICT
WORLD HERALD, OMAHA, NEBR.
31 January 1960

Atlas Can Go 8,000 Miles

Also Accurate as Any
of Soviet Missiles

By Howard Silber

The Atlas, officially described as a 62-hundred-mile missile, actually can home in on a target more than eight thousand miles from its launching pad.

This means an Atlas launched from an Omaha or Lincoln area base could strike virtually any military or industrial installation in the Soviet Union.

And, if the Atlas would perform as accurately in war as it has in some test firings, the targets would be wiped out by the nuclear or thermonuclear warheads.

Evidence Piles Up

Evidence of the added distance capability of the Atlas has begun to pile up.

The Strategic Air Command announced it will build Atlas launching bases in the Southwest—Altus, Okla., Roswell, N. M., and Abilene, Tex.

Launched from Roswell, for example, a 62-hundred-mile Atlas probably could reach Moscow, Kiev, Omsk and some lesser Soviet cities.

But it would fall short of the vital industrial complexes near Stalingrad and Kharkov.

More Evidence

It would not reach the Soviet Union's "Spaceport No. 1" near the Aral Sea. (See Page 6-8 of This Week magazine.)

SAC was asked about this Saturday.

"We're allowed to say only that the range is 62 hundred miles," a spokesman replied.

"But it's obvious that we wouldn't be putting the Atlas that far south if it didn't have the capability of reaching its targets," he added.

Additional evidence came from Lieut. Gen. Bernard A. Schriever, Chief of the Air Force Research and Development Command and former head of the Air Force Ballistic Missile Division.

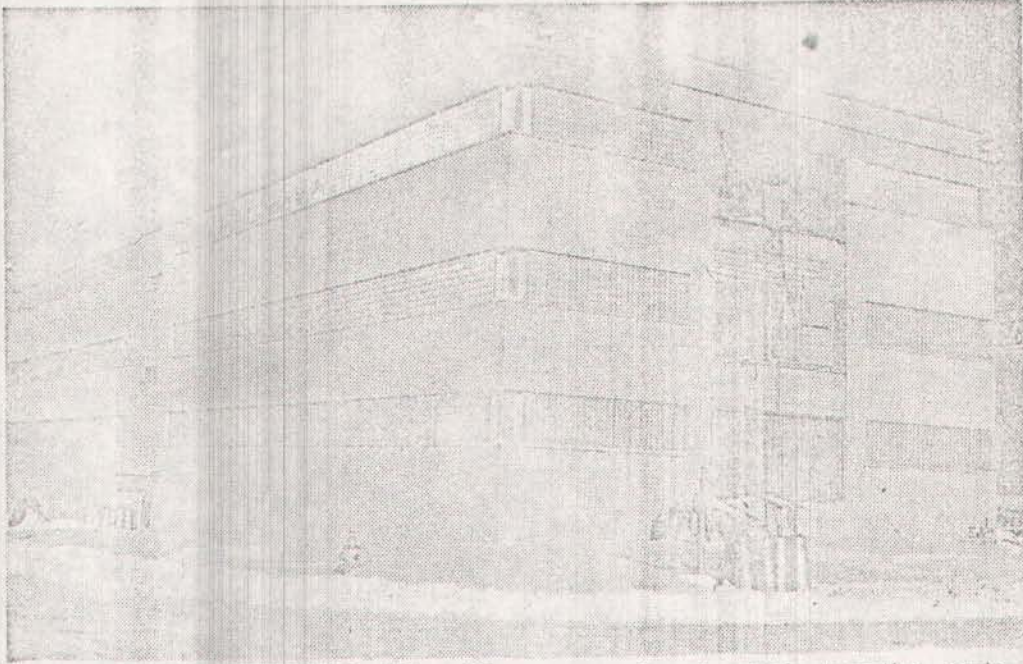
'Ours as Good'

General Schriever said the Atlas can be flown "farther" than 62 hundred miles.

Commenting on the Soviet claim that its multi-stage ballistic rocket fired January 20 into the Central Pacific had fallen 1.24 miles from its target after traveling 7,767 miles, General Schriever said:

"Our accuracy is as good as or better than theirs."

President Eisenhower has said that the Atlas in long-range tests has reached within two miles of its target.



SAC'S MISSILE COMPUTER—This addition to Strategic Air Command's Control Center in Omaha, to be completed this year, will be the targeting center for all of SAC's intercontinental ballistic missile bases, including the Atlas complex scheduled for Lincoln. With specially trained

personnel and missile targeting equipment, the computer center will supply trajectory and space data into the guidance systems of the 5,500 mile range missiles. This additional structure is a southwing to SAC Control Center.

Majority of Joint Chiefs Opposed Boosting U.S. ICBM Strength

Special to The Journal

Washington — A majority of the Joint Chief of Staff opposed a 33% increase in U.S. intercontinental ballistic missile strength last spring, Air Force Chief of

Staff Gen. Thomas White has revealed.

In secret House testimony just released, Gen. White told a House Defense Appropriations subcommittee, "I am sure that the Army chief of staff (Gen. Maxwell Taylor) opposed to some degree any increase, and the Navy opposed any increase and recommended the cancellation of the Tital program at that time."

An Air Force recommendation to increase U.S. ICBM strength from 20 squadrons to 27 was approved by the Defense Dept., despite the other services' opposition.

A 28th missile squadron was cut by the Air Force in order to spend more money putting the first 27 bases underground, General White said.

General White told the subcommittee he could not say it would be "vital" to beef up the U.S. ICBM program with additional liquid-fueled missiles. "I can only say more weapons would be more insurance," the Air Force chief said.

Addition of the increased

missile strength last year was pushed by the appropriations committees in both House and Senate over budgetary restrictions.

Asked if the U.S. could have prevented "the so-called ICBM gap," General White told the subcommittee, "I think when you consider everything overall, to have done so would have meant making decisions two or 3 years ago to go faster. I do not believe we had enough confidence in missiles at that time to have justified such a decision."

General White repeated that he felt the deterrent of the Strategic Air Command was sufficient "to preserve this nation."

Lincoln Journal

8 Febr. 1960

'Silo' Plans for Lincoln Are Released

Structures Will Store Atlas Underground

B-70 maker ready to deliver
if funds changed. Page 7.

By John Jarrell
World-Herald Staff Member

Los Angeles, Cal.—Details of the underground construction where nine Atlas Intercontinental ballistic missiles will be housed around the Lincoln Air Force Base were disclosed Monday by the Air Force Ballistics Missile Division.

The announcement came regarding construction at Vandenberg Air Force Base, Cal., but officials here said the silo-type prototype being built at Vandenberg will be duplicated at Lincoln and five other bases.

Col. William E. Leonhard, deputy commander for facilities at the Ballistics Missile Division, said construction near Lincoln would begin within 60 days.

Greater Protection

The underground silos, it was said, are designed to "increase survivability" of the giant Atlas missiles in the event of surprise enemy attack.

If hostilities come, the missiles would be raised to ground level and launched "in a matter of minutes."

The Atlas will be maintained in a vertical position at all times.

The contract for excavating the silo and underground block house at Vandenberg and for pouring reinforced concrete walls has been let to Peter Kiewit Sons Company of Omaha.

'Silo' and 'Crib'

Each silo will consist essentially of a deep concrete-lined hole with a structural steel "crib" inside.

The crib will be fitted with the elevator and ground support equipment required at a launching complex, and will contain a working platform for servicing the missile.

The silos near Lincoln and the other bases where the underground storage is being constructed will be of the most hardened variety, designed to keep an Atlas safe from even a near miss.

Offutt Has 'Coffin'

It will differ from the soft configuration at Omaha's Offutt Air Force Base, where the missiles will be kept horizontal in a reinforced concrete coffin from which they will be raised automatically for firing.

In the Omaha area, the missiles will be grouped by threes for a total of nine, compared to the nine separate missiles in their silos around the Lincoln base.

In addition to Lincoln, the new, hardened underground silos will be built at Air Force bases at Salina, Kans.; Abilene, Tex.; Altus, Okla.; Roswell, N. M., and Plattsburgh, N. Y.

Cost Doubled

Officials estimated it will cost 44 million dollars to build nine underground silos for a squadron. That compares with 22 million dollars for the Omaha area launchers.

"The Atlas weapons system in hardened sites will enhance survivability and make ours a truly deterrent force," the Air Force said.

Generally, the Air Force is allotting 13 to 15 months for construction of silos for a squadron, another 10 months, part of it overlapping, for installation of equipment and system checks, and three months to make it operational.

New Nebraska Silos



MISSILES FOR LINCOLN—These two cutaway drawings released by the Air Force Ballistic Missile Division at Los Angeles disclose the type of underground Atlas missile system to be built in the Lincoln-southeast Nebraska area, beginning this summer. Maintenance, checkout and fueling operations are carried out underground in the silo containing the protected missile in the left drawing. The right illustration shows the Atlas raised and its rocket engines ignited. Countdown of the big missile is conducted in spherical underground blockhouse at the right.

Atlas Hardening Plans For Lincoln Area Told

. . . To Require Elevators

San Diego, Calif. (AP)—A full-scale mockup of the underground Atlas missile launching facilities to be constructed in the Lincoln-southeast Nebraska area is being built here at Fair-Astronautics.

The Air Force said the mockup is east of the Atlas factory on Kearney Mesa near here.

In operation, massive concrete doors covering the holes would be opened and the missiles would be raised to the surface by elevators before firing.

Maj. Gen. O. J. Ritland, commander of the Air Force's Ballistic Missile Division, last week disclosed plans for an Atlas silo at Vandenberg Air Force Base, Calif., for test and check-out purposes.

13 Squadrons

Later, he said, underground facilities for the missile will be built at other operational sites. The Air Force has announced 13 Atlas squadrons to date.

They include one each near Offutt Air Force Base and Lincoln Air Force Base in Nebraska.

Earlier plans provided for the Atlas to be maintained horizontally in some instances in reinforced concrete "coffins." At some sites the coffinlike structures were to be placed below ground level, with only the roof exposed.

The Offutt-Omaha complex, now under construction, falls in this category. Col. Alfred Vogler, Air Force Deputy Regional Civil Engineer, said there have been no changes in the plans for the Offutt site.

The silo arrangement provides for storage of the missiles in deep, concrete-lined holes containing working platforms for serving the vertical ICBMs.

Shortly before the Christmas holidays, plans for the Lincoln site were pulled back for revision.

Col. Vogler said Tuesday his office is unable to comment further on Lincoln construction plans at this time.

OMAHA DISTRICT
WORLD HERALD, OMAHA, NEBR.
16 February 1960

Atlas Project Bids Sought

Engineers Call Today
on Lincoln Work

World-Herald Washington Bureau,
1220-22 National Press Building.

Representative Phil Weaver said Monday. Army Engineers will call Tuesday for bids on construction of nine underground sites that will house Atlas intercontinental ballistic missiles surrounding the Lincoln Air Force Base.

He said the bids will be receivable March 1, opened April 11, and that the nine hardened silos will be completed in the early summer of 1961.

The First District Congressman reported the silos will be 175 feet deep and 50 feet in diameter.

Launching-control buildings will be 30 feet deep, 40 feet in diameter and built of reinforced concrete.

Mr. Weaver said he was informed construction of the silos will cost between 25 million and 30 million dollars and other equipment—to be bought separately—will cost another nine million dollars.

The cost of electronic equipment, not specified, is likely to bring the total price of the Lincoln construction, excluding the missiles themselves, to the 44-million-dollar figure used a week ago by officials of the Air Force's Ballistic Missile Center in Los Angeles.

OMAHA DISTRICT
LINCOLN STAR, LINCOLN, NEBRASKA
11 February 1960

OMAHA DISTRICT
WORLD HERALD, OMAHA, NEBR.
12 February 1960

Air Conditioning for Bases in Bids

Fort Worth, Tex. (UPI)—Bids for heating, air conditioning and ventilation at seven Air Force Atlas missile bases around the nation have been opened by the Corps of Engineers.

The bids total \$1,773,721.

The bids opened were for projects at Lincoln AFB, Neb.; Schilling AFB, Kans.; Vandenberg AFB, Cal.; Walker AFB, Roswell, N. M.; Altus AFB, Okla.; Plattsburgh AFB, Plattsburgh, N. Y., and Dyess AFB, near Abilene, Tex.

Award Soon On Lincoln Atlas Contract

Omaha (UPI) — A major contract for construction of the Atlas missile project in the Lincoln vicinity is expected to be awarded within 60 days, according to Col. James S. Caples, Air Force regional civil engineer here.

At the same time, Caples confirmed that the Lincoln ICBM project will be the "silo type," that is, completely buried underground for maximum protection in the event of an enemy attack.

The Lincoln complex will be composed of nine launchers, each on a separate site. The Omaha district office of the Corps of Engineers will be in charge of construction.

After the construction has been completed, Strategic Air Command will take over the responsibility of maintaining the operational readiness of the facilities.

OMAHA DISTRICT
LINCOLN STAR, LINCOLN, NEBR.
16 February 1960

Lincoln Area Atlas Sites \$25 Million

**CONTRACT BIDS
CALLED MAR. 1**

Contract bids will be called March 1 for an estimated \$25 million to \$30 million in construction for 9 Atlas intercontinental ballistic missile launcher sites and control centers ringing the Lincoln Air Force Base.

The U.S. Army Corps of Engineers will announce the bid call Tuesday, Rep. Phil Weaver reported Monday.

Contracts will be opened April 11.

Work must be completed by the early summer of 1961, probably in late June, according to Weaver.

Estimated cost of the construction work had earlier been tabbed at between \$20 million and \$25 million.

Hardening Ups Cost

The cost boost resulted from hardening of the Lincoln sites, that is placing missiles entirely underground, Col. D. G. Hammond, Omaha Corps of Engineers district chief, said.

Each of the 9 sites will consist of a 175-foot deep silo some 50 feet in diameter, Weaver said.

Each site also will contain an underground launch control center 30 feet deep and 40 feet in diameter.

The March contract call also includes utility work, road construction and refueling systems.

9 Million Gear

In addition, the Corps will purchase and install some \$9 million in equipment, Weaver said.

Not included in the contract call is launch control equipment which the Air Force will install.

Each of the 9 sites contains a launcher; a launch control center; a utility system; a fuel and fuel storage system; process vessels; roads, grading and drainage, according to the Omaha Corps of Engineers office.

Among installations which will later be constructed at Lincoln Air Force Base itself include a guided missile assembly and test facility, a liquid oxygen generating facility, a liquid oxygen disposal unit and various communications facilities.

Lincoln's launcher sites will be located at Dorchester, Beatrice, Nebraska City, Seward, Tecumseh, Elmwood, York, Cortland and Brainard.

Total cost of the complex has been estimated at nearly \$128 million.

OMAHA DISTRICT

THE LINCOLN STAR, LINCOLN, NEBRASKA
24 February 1960

Launching Site Land Acquisition Under Way

Some 219.85 acres of land in 8 counties ringing the Lincoln area is now being acquired by the federal government for Atlas intercontinental ballistic missile launching sites.

The government will pay between \$60,000 and \$80,000 to acquire the land, according to Col. David Hammond, Omaha district engineer for the Army Corps of Engineers.

The real estate transactions include land easements necessary for water and pipe lines, and excess roads. This land will be on long-term lease to the government.

Land which will be used for the 9 Atlas sites is being purchased.

Exact sites, acreages and farms involved:

—Gage County, approximately 19 miles north of Beatrice; 19.8 and 2.89 acres from Fred Hartwig Jr., and 3.13 acres from Paul C. Hansel.

—Seward County, approximately 5 miles northwest of Seward; 8.95 acres and 1.84 acres from the farm owned by Mary Suhr and others; 9.41 acres and .07 acres, both from Christian G. Keller.

—Butler County, approximately 4 miles northeast of Brainard; 11.94 acres and 4.26 acres from Estella C. Smith, and 5.28 acres from Emil Hladky.

—York County, 5 miles west of York;

18.68 acres and .15 acres from R. H. Stephens, and 6.21 acres from Mandus, Arthur and Alice Sandall.

—Gage County, approximately 4 miles southwest of Beatrice; 16.14 acres and .07 acres from Paul G. Claassen; 1.52 acres from Frank C. Summers; 2.18 acres and .64 acres from Louis W. Fellwock; 2 acres from Henry F. Brandt; 2.22 acres from Clifford J. Meyer, and 6.12 acres from Don A. and Paul G. Claassen.

—Otoe County, approximately 5 miles west of Nebraska City; 15.27 acres from Louise Roderbrack and Ora Beausang; 3.79 acres from Ora Beausang, and 6.13 acres from Edward J. W. Reese.

—Cass County, approximately 3 miles west of Elmwood; 15.32 acres, 2.25 acres and .56 acres, all from Mimmie Hess; 3.19 acres and 1.32 acres from Elda M. Lenz; .93 acres from James and Lena Ramaly; .57 acres from Robert and Hazel Kunz, and .07 acre from Emily J. and Donald J. Gonzales.

—Johnson County, approximately 4 miles north of Tecumseh; 5.37 acres and .06 acres from Merle B. Riensche; 11.19 acres, 2.27 acres and 1.59 acres, all from Leonard O. Kamen, and .63 acres from Philip F. Nestor Jr., and George Leahy.

—Saline County, 4 miles west of Wilber; 15.38 acres from Mary Dreyo and Sylvia Kane; 2.59 acres and .63 acres from Edward Karpisek, and 1.39 acres and 2.02 acres from Rudolph R. Homolka.

OMAHA DISTRICT
EVENING WORLD-HERALD, OMAHA, NEBRASKA
2 March 1960

Lincoln Atlas Bids Called For

*Opening Set
For Apr. 11*

By Bess Jenkins

Dozens of the nation's top construction firms received notice Wednesday that bids for Lincoln-southeast Nebraska's Atlas intercontinental ballistic missile base are being sought.

The Omaha District office of the Army Engineers, responsible for the basic construction of the 9 launcher site "silo" type Atlas system, said bids will be opened at 2 p.m. Apr. 11 in Pershing Auditorium.

Construction must begin within 10 days of the contract awarding. The Engineers-supervised construction job must be completed by May 25, 1961. The Air Force then moves in its contractor to install the electronic components of the missile system.

\$70 Million

Complete cost of the Atlas program to the "ready-with-missiles-for-firing" status will be around \$70 million. The Engineers' construction portion is estimated to cost from \$25 to \$30 million.

More than \$1.5 million will be spent to build and install propellant loading systems at the 9 Lincoln area Atlas launcher sites.

Contract Awarded

A \$10,888,178 contract was awarded by the U.S. Army Engineers to Paul Hardeman, Inc., of Stanton, Calif., at a Ft. Worth, Tex., bid opening to provide this construction work for the Lincoln and 6 other intercontinental ballistic missile base systems.

The Hardeman firm, bidding almost \$10 million below the government estimate of the 7-missile base installation job, will begin its job in September.

Atlas-Fueling Contract Let

Lincoln 1 of 6 Bases Covered in Letting

Fort Worth, Tex. (UPI)—A \$10,888,176 contract for building and installing propellant-loading systems at Atlas missile bases in the Lincoln, Neb., area and six other locations was awarded here Tuesday by Army Engineers.

The contract went to Paul Hardeman, Inc., of Stanton, Cal., which bid almost 10 million dollars below the Government estimate.

Work will begin in September. Completion is scheduled in October, 1961.

The work will involve 55 underground silo-type systems to fuel missiles at the seven sites. Nine systems will be installed at each of the bases except Vandenberg Air Force Base, Cal., which gets one.

The other sites are Altus, Okla., AFB; Dyess AFB, Abilene, Tex.; Walker AFB, New Mexico; Schilling AFB, Salina, Kans., and Plattsburgh AFB, New York.

Nebraska's other missile base—Offutt, with launcher at Mead, Arlington and Missouri Valley—will have its ground-support equipment and technical maintenance facilities constructed by the H. K. Ferguson Co. of Cleveland.

Omaha Personnel

Convair Astronautics, producer of the Atlas intercontinental ballistic missile, this week awarded the \$5 million contract to the Cleveland firm.

William L. Young, Convair operations manager, said Ferguson Co. will hire Omaha personnel and make most of

OMAHA DISTRICT
LINCOLN EVENING JOURNAL AND NEBRASKA STATE JOURNAL, LINCOLN, NEBRASKA
3 March 1960

4 Tons of Atlas Plans



WIREPHOTO

BIG PLANS FOR BIG OFFENSE—Behind the construction of the Lincoln area's 9-launcher site Atlas missile base are these 4 tons of paper. Col. John J. Haley, Deputy Omaha District Army Engineers, looks over the 750 sets of plans and speci-

fications before they were mailed out to some 600 contractors and suppliers with invitations to submit bids on the Lincoln missile complex. The bids are to be opened at 2 p.m. Apr. 12 in Lincoln.

Atlas Total Planned Here May Rise 33%

By Gordon White
Washington — Strength of the Atlas missile squadron to be based at Lincoln may be boosted by as much as one third.

Air Force proposals to augment presently-planned Atlas squadrons were revealed here by Defense Secretary Thomas Gates.

Secretary Gates indicated at a Pentagon press conference that he had been "briefed" on a number of suggestions by the Air Force and the Navy to in-

crease U.S. missile forces in the next two years. No cost figures were given.

Contractors Warned
Engineering specifications drawn by the Air Force Ballistic Missiles Division for planned underground Atlas bases, including those at Lincoln and Roswell, N.M., warn prospective contractors that "additional units may be constructed for the planned 9-silo launch complexes. Lincoln bids are to be opened Apr. 12.

One of the 10 missiles in

present squadrons will be a spare. Increased numbers for each squadron might boost total strengths to 15 ICBMS, all of them ready to fire, a 50% increase in U.S. retaliatory capabilities.

The engineering designs require that equipment for all launchers be interchangeable, to facilitate addition of other sites.

We constantly review our programs," Gates said, giving no indication as to the probable Defense Dept. decision on the proposed missile increase.

Congressional pressure, particularly from Demo-

crats, has been strong for a setup of U.S. defenses to prevent a missile gap vis-à-vis the Soviet Union in 1962.

The augmented Atlas squadrons would become operational over the next 18 to 24 months. Present Atlas and Titan squadrons will have 10 missiles each, with the exception of early 3-missile units at Vandenberg AFB, California, and Warren AFB, Wyo.

'Gap' Expected

Present U.S. planning conceded a nominal "missile gap" in 1962, to be offset by believed U.S. preponderance in manned bombers.

After 1962, large numbers of Minuteman ICBMS are scheduled to become operational. It is believed that the Minuteman, based on mobile launchers or in widely dispersed, hardened sites, will make an attack on the U.S. unattractive for a potential enemy when it comes into the inventory.



HONOREES—Lt. Col. Fred Bailey presents a swagger stick to Lt. Gen. Guy N. Henninger (center) who was honored with Maj. Gen. Lyle A. Welch.

OMAHA DISTRICT
LINCOLN EVENING JOURNAL, LINCOLN, NEBRASKA
17 March 1960

Atlas Missile Bid Meet Set

Omaha (AP)—A pre-bid conference for contractors interested in the Lincoln area Atlas missile base job will be held Friday morning at the Rome Hotel here, Army Engineers said.

Contractors will be invited to ask any questions concerning the job. Bids on the project will be opened at 2 p.m. Apr. 12 at Pershing Auditorium in Lincoln.

On display at the conference here will be a small model of a hardened Atlas launcher site, the type scheduled for the Lincoln area.

Atlas Sites Stress CD

*Significant to
Lincoln Area*

Location of Atlas missile launching sites in the Lincoln area increases the importance of adequate civil defense measures in this area, according to Robert E. Waggoner, Region 6 Civil Defense director.

Speaking at a special luncheon Tuesday, Waggoner of Denver, said Civil Defense is of particular significance to the people of Lincoln "because of the nature of the Omaha-Lincoln complex itself," and because of radioactive fallout from which no area of the United States can consider itself safe.

"I'm not divulging any secrets when I say that a great percentage of retaliatory missiles will be housed in this area," Waggoner said.

"This increases the importance of building a non-military defense capability in the Lincoln area," he added.

The armed forces committee of the Lincoln Chamber of Commerce sponsored the Rotary luncheon and paid tribute to Lt. Gen. Guy N. Henninger on his retirement from the Nebraska National Guard. Special recognition was also given Maj. Gen. Lyle A. Welch on his appointment to succeed Gen. Henninger.

12 Wednesday, March 16, 1960—P.M. Lincoln Evening Jour

Lincoln on List, May Get More Missiles

Washington (UPI) — The Pentagon is studying the feasibility of an 18% increase in the planned force of Atlas and Titan intercontinental ballistic missiles.

Under the plan for Atlas expansion, the last 6 of the now planned 13 squadrons would have 12 launchers in-

stead of 9 and 13 missiles instead of 10. All 6 squadrons would have their launchers in underground, concrete-lined silos.

The 6 squadrons are being built at Schilling AFB, Salina, Kan.; Lincoln, AFB, Neb.; Plattsburgh AFB, N.Y.; Altus AFB, Okla.; Dyess AFB, Abilene, Tex., and Walker AFB, Roswell, N.M.

The plan for Titans calls for a similar increase in launchers and missiles for each of the last 8 of 14 Titan squadrons now planned. They likewise would be based underground.

Defense Secretary Thomas Gates indicated that one of the considerations that will guide his judgment is whether increasing the size of squadrons would add as much to the nation's striking force as other weapons systems.

They have discovered that they could operate squadrons with 12 missile launchers as effectively as 9, without much increase in unit personnel or supporting equipment.

If approved by the administration and put up to Congress, plans now being examined might call for extra appropriations estimated to total more than \$400 million.

The total increase in missiles would be 42, raising the force of hydrogen bomb-carrying rockets from the 270 now planned to 312 by some time in 1963. The number of planned missile launchers, in underground sites, would be increased from 239 to 281.

OMAHA DISTRICT
EVENING WORLD-HERALD, OMAHA, NEBRASKA
17 March 1960

Missile Base Meeting for Builders Is Friday

Contractors interested in bidding on the Atlas missile base project in the Lincoln area have been invited to a pre-bid conference Friday morning at the Rome Hotel.

They will have an opportunity to ask questions about the job. A model of the type of launcher site scheduled for the area will be shown.

Bids will be opened at 2 p. m. April 12 at the Pershing Auditorium in Lincoln.

Lincoln Launcher Pad Site Protection Setup Complex

By Gordon White

Washington — So you think construction of an Atlas system is complex?

No simpler and certainly not left to luck is the network of protection scheduled to guard the 9 launcher pad sites of Lincoln area's underground Atlas system.

Interested bidder representatives learned this first hand when the protective pattern was among details outlined at a pre-bid conference conducted by Omaha District Army Engineers.

Six hefty volumes of plans and specifications show:

Heavy construction work is expected to take about a year. During most of that time there'll be nothing classified or secret on the sites. Air Force personnel may move in secret launch control equipment early next year as construction nears completion.

Lincoln's erratic and rugged winter weather will be a hazard the contractors will have to assume in their bidding; the government will not be responsible for added costs. "Complete weather records and reports may be obtained from the U.S. Weather Bureau at Lincoln," the contractors are advised.

Site materials will be shipped to railhead points at Eagle, Dunbar, Tecumseh, Firth, Beatrice, Wilber, York, Seward and Brainard for the 9 individual sites.

Minimum wage rates are set by the Labor Dept. at "prevailing levels for the Lincoln area, generally along union scales."

Security Guards

Security guards will be required chiefly for critical items at each site, including propellant loading systems; diesel generators; air conditioning equipment; electrical control equipment;

pump and compressors; control instruments; glass enclosures; silo doors and launch platform mechanisms.

Installation of final secret launching gear will begin at site number one on Mar. 17, 1961, and at site number 9 May 12 next year.

The entire area of each launch pad will be floodlighted for security protection at all times.

TV Monitors

Chain-link security fences will have electrically operated gates. Each entrance gate will be protected by a television camera monitor.

Red, green and amber warning lights visible at a half mile and powerful horns audible at a half-mile range will be used to warn personnel of imminent launchings.

Light-sensing devices will be installed at each site to detect either internal explosions or enemy thermo-nuclear detonations.

Glass Enclosures

Stout, glass enclosures will protect personnel and the missile from interior mishap.

Massive concrete doors will cover the silo itself to be opened only seconds before the elevators raise the ICBM for firing.

Each site will rise only a few feet above the surrounding farmland, with fences, guardhouses and a water cooling tower the only surface structures.

The silo itself will be 175 feet deep and 56 in diameter.

Atlas Job Needs Speed, Quality

... HAMMOND TELLS BIDDERS

Omaha (UPI) — Prospective bidders on the Lincoln Air Force Base intercontinental ballistic missile launch facilities were told Friday the government would demand a safe job combining quality construction and on-time completion.

Col. D. G. Hammond, district engineer for the Omaha District of the Army Corps of Engineers, conducted the prebid conference on the project which will cost an estimated 10 million dollars. The bid opening will be held April 12 at 2 p.m. at Pershing Memorial Auditorium in Lincoln.

Nine missile launching sites

incorporating the new hard configuration underground silo complexes will be located near the Lincoln base.

'Urgency Factor'

Hammond stressed the "all-important urgency factor." He told the contractors "you can and must meet the completion dates. The Lincoln Atlas ICBM job, like others, is a main cog in the national defense program."

He warned that the "schedule is tight and it will require unusual measures on your part to protect the work against any conditions that might delay construction."

He added that, despite the emphasis on speed, the government would accept nothing short of quality construction as described in the specifications.

Other Dates

Hammond also pointed out other forthcoming dates in connection with the extensive missile construction in Nebraska.

He said the Corps would advertise for bids March 22 for construction of a liquid oxygen plant and May 17 for construction of re-entry vehicle facilities at the Lincoln Air Force Base.

Bids will be opened March 31 for construction of dorms and a dining hall to be built at Offutt Air Force Base south of Omaha.

Each of the 4 launch sites attached to the Lincoln base will have an underground launch control center, an underground launch silo, utilities systems, roads, grading and drainage, fuels storage and handling systems, process vessels and fencing.

A. F. to Add 3 Lincoln Pads

9 Already Scheduled; 'Hard' Silos Seen

World-Herald Washington Bureau,
1220-22 National Press Building.

The Air Force announced Friday it will add three Atlas missile launching pads to the nine already scheduled for the Lincoln Air Force Base.

The Defense Department also plans to speed construction of the Midas detection satellite and a speedup in Ballistic Missile Early Warning System radars in Alaska and Northern England.

The Air Force said it planned to increase the number of Atlases previously programmed for launching sites in 1962.

Cost 500 Million

This increase, it added, would be accompanied by an increase in the number of missiles and launching pads at certain Atlas bases. It identified one of the bases as Lincoln.

Program revisions will cost about 500 million dollars in the next 15 months, it is estimated.

Nothing was said by the Air Force about Offutt Air Force Base at Omaha, where nine Atlas missiles are to be located.

Kept in Silos

The decision with regard to Lincoln, however, appeared to be in line with reports that the number of Atlas missiles will be increased at several bases where missiles will be kept in underground silos.

These "hardened" silos, which provide added protection in event of enemy attack, will be built around the Lincoln base.

They are not planned for Omaha.

Actually, there probably will be 13 Atlas missiles at Lincoln, since plans provide for a spare at launching sites.

Atlas Ready on Schedule

Washington (AP)—Atlas intercontinental missiles will be operational at Warren Air Force Base, Cheyenne, Wyo., next month, as scheduled, the Air Force said Friday.

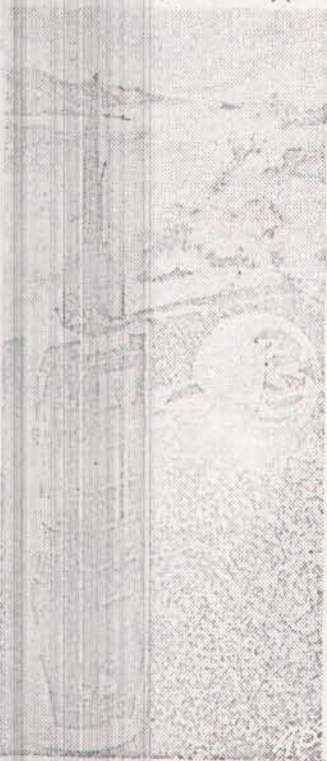
Three More Atlas Pads Might Be East of Lincoln

Survey Made When 9 Original Sites Chosen for Complex

Special to The Journal

Washington—Three new launching pads proposed for the Lincoln Atlas missile complex would probably be located to the east of Lincoln.

Sites have not been announced, but it was understood the Air Force was "seriously investigating" 3 sites east of the capital city.



Silo type Atlas installation

A survey of the area was made when the other 9 launching sites were under study, and it is not expected the Air Force will resurvey the area.

The 3 additional sites were announced by the Air Force through Rep. Phil Weaver (R-Ist), bringing the total number of launching pads in the Lincoln area to 12 and the number of missiles to 13.

An additional 100 to 150 men would be stationed at Lincoln.

The Air Force decision to enlarge the complex must be approved by the Armed Services Committee and the Appropriations Committee of both the House of Representatives and the Senate.

Originally, Lincoln was scheduled for nine launching sites and 10 missiles with 700 officers and men.

The Air Force said it would cut-back its Bomarc Long-range anti-aircraft missile program and make substantial changes in the air defense and missile programs.

The Lincoln Atlas additions would be part of an over-all program to increase the Air Force's deterrent force and air defense missile detection system, Weaver said.

Washington sources didn't know how the increase would effect the contract bidding which is now under way for the nine launching pads. But it was expected contracts would be extended to cover the additional projects.

In addition to the increased Atlas program the Air Force announced further increases in the:

—Midas project, detecting intercontinental ballistic missile with a reconnaissance satellite system.

—Speedup in land-based ballistic missile early warning system program.

The USAF said these would be financed chiefly through reduction in the Bomarc program and cancelation of the proposed building of SAGE combat control centers for air defense.

An effective SAGE system for directing the Bomarc missiles and interceptor planes will be completed, however, the Air Force said.

SAGE is the Pentagon term for semi-automatic ground environment—an electronic missile detection system.

COLN, NEBR.

OMAHA DISTRICT
LINCOLN EVENING JOURNAL, LINCOLN, NEBRASKA
30 March 1960

Atlas Squadrons Estimated To Cost \$347,000,000 Each

Washington—The Atlas ICBM squadrons planned for Lincoln and 12 other air force bases will cost an estimated \$347,000,000 each, the Air Force revealed.

An average of \$194,000,000 will represent development costs for each of the 13 planned squadrons in the Atlas force.

Construction, missiles and other equipment will represent an investment of \$153,000,000, at each base, Air Force officials told the House defense appropriations subcommittee.

Boosts of one-third in squadron strengths could add \$51,000,000 to the cost of each augmented squadron, if recent Air Force proposals win

almost certain Congressional approval.

OMAHA DISTRICT
EVENING WORLD-HERALD, OMAHA, NEBRASKA
12 April 1960

Contractors Told Atlas Job Here Has Grown

Contracting firms whose bids to construct the Lincoln Atlas missile base will be opened Tuesday in Lincoln must agree to build 3 additional launcher site pads.

The Omaha District office of the Army Engineers sent out supplemental notices to prospective bidders this week setting forth this provision.

The addendum states the successful bidder, if ordered to construct 3 additional sites, will be paid for these at the rate received for each of the original 9 launchers.

Lincoln's underground Atlas system of intercontinental ballistic missiles is one of several scheduled to receive additional launchers and missiles as a result of the Air Force's

Bomarc missile program cancellation.

Real estate and engineering representatives of the Omaha District Army Engineers are members of the Air Force site team out now to study feasible locations for the 3 new launcher pads. It is understood this team is making a complete circle of the Lincoln Atlas area.

Col. Vernon Hastings, as chief of the Air Force Ballistic Missile Division for the Offutt and Lincoln Atlas programs, said a 5-member team of Air Force surveillance personnel is set up to join the supervisory Army Engineers on the Lincoln Atlas project.

Construction must begin within 10 days after the contract awarding by the Engineers.

The AF surveillance group at Lincoln will increase as construction progresses.

"It will hit a peak of 55 to 60 Air Force men, about the number we now have at the Offutt base," Hastings said.

The Offutt sites at Mead, Arlington and Missouri Valley are 90% completed insofar as Army Engineers construction is concerned, according to Col. Hastings.

The scheduled May 1 completion delayed by bad weather, now is set for mid-June.

The missile chief said it will be another year before the Air Force-supervised equipment is completely installed by Convair Astronautics and associate contractors.

He said there are 243 people now on the scene employed by the Air Force contracting firms and the peak of 1,400 will be reached in July.

12 Missiles for Lincoln?

Bid Change Indicates Base May Expand

Enlargement of the Lincoln Atlas installation from nine to 12 missiles was indicated Tuesday as Army Engineers prepared to open construction bids on the multimillion-dollar project.

A change in the bidding specifications requires that contractors seeking to build the nine missile job must, if so ordered, build facilities for three additional missiles.

Bidding is on a per-missile basis. The unit price for the original nine-missile job would hold for the additional missile launchers.

Secretary of Defense Gates recently announced that some of the nation's missile installations would be enlarged. No specific order increasing the size of the Lincoln installation has been made, however.

Army Engineers said the enlargement option would permit additional missile construction to get under way speedily and would insure that the additional missile facilities are identical to the original nine.

Bids on the Lincoln job, which will consist of nine missiles housed completely below ground on scattered individual sites, were to be opened this afternoon at Lincoln.

OMAHA DISTRICT
THE LINCOLN STAR, LINCOLN, NEBRASKA
13 April 1960

THE

\$17 Million Atlas Site Bid Made

... LINCOLN AREA

Western Contracting Corp. of Sioux City, Iowa, submitted the apparent low bid of \$17,400,000 Tuesday on basic construction of the Lincoln Atlas intercontinental ballistic missile bases.

The Army Engineer estimate on the 9 launcher site missile system was \$18,398,377.

Other bidders included Gus K. Newberg, Chicago, \$18,467,000; S. J. Groves Co., Minneapolis, \$21,260,000; Peter Kiewit Sons Co., Omaha, \$18,139,362; Raymond International, New York, and Allied Firms, \$17,947,000; Potashnick Construction, Inc., and Associates, Cape Girardeau, Mo., \$20,957,400; Morrison-Knudsen, Los Angeles and Allied Firms, \$18,297,000; George A. Fuller, Los Angeles, \$18,646,800.

The bids covered only the work under supervision of the Army Engineers. They do not cover the cost of the missiles nor the electronic equipment to be installed by contractors to the U.S. Air Force.

Base construction is expected to be nearing completion by June of next year when installation of electronic equipment is scheduled to begin. Operational readiness is programmed for early in 1962.

OMAHA DISTRICT
THE SIOUX CITY JOURNAL, SIOUX CITY, IOWA
13 April 1960

OMAHA DISTRICT
THE DAILY PLAINSMAN, HURON, SOUTH DAKOTA
13 April 1960

Sioux City Firm Is Low Bidder On Missile Base

LINCOLN (UPI)—The Western Contracting Corporation of Sioux City, Iowa, was the apparent low bidder Tuesday on construction of the nine-site Atlas intercontinental ballistic missile complex around Lincoln.

The Sioux City firm submitted a bid of \$17,400,000.

There were eight bidders. The government had estimated the work would cost \$18,398,377.

The firm had never been awarded a contract of this type but has done considerable work on federal government civil projects, including work on Oahe and the Big Bend dams on the Missouri River.

The specifications for the work were contained in three volumes of about 600 pages.

The contract is expected to be awarded in 10 days to two weeks. Construction is scheduled to begin about 10 days later. The contract calls for completion of the work in May of next year after which the Air Force will move in its technical equipment.

Location of the sites: two in Gage County near Beatrice; one in Seward County, five miles northwest of Seward; one in Butler County near Brainard; one in Otoe County near Nebraska City; one in Cass County near Elmwood; one in Johnson County north of Tecumseh; one in Saline County near Wilber; one in York County, three miles west of York.

There has been some discussion that three more sites may be added.

Firm Here Low Bidder on Huge Job

*Western to Build
Missile Base
at Lincoln*

LINCOLN (AP) — Western Contracting corporation, of Sioux City, submitted the apparent low bid of \$17,400,000 Tuesday on basic construction of the Lincoln Atlas intercontinental ballistic missile base.

The army engineer estimate on the nine-launcher site missile system was \$18,398,377.

If Western's bid is accepted, it will mark the Iowa firm's first entry into missile base construction. Although Western has bid previously on missile bases, it is known principally for work on Missouri basin projects.

Other bidders included Gus K. Newberg, Chicago, \$18,467,000; S. J. Groves Co., Minneapolis, \$21,260,000; Peter Kiewit Sons Co., Omaha, \$18,139,362; Raymond International, New York, and Allied Firms, \$17,947,000; Potashnick Construction, Inc., and Associates, of Cape Girardeau, Mo., \$20,957,400; Morrison - Knudsen, Los Angeles and Allied Firms, \$18,297,000; George A. Fuller, Los Angeles, \$18,646,800.

The bids covered only the work under supervision of the army engineers. They do not cover the cost of the missiles nor the electronic equipment to be installed by contractors to the United States airforce.

Basin construction is expected to be nearing completion by June of next year when installation of electronic equipment is scheduled to begin. Operational readiness is programmed for early in 1961.

OMAHA DISTRICT
THE LINCOLN STAR, LINCOLN, NEBRASKA
16 April 1960

AF Names Additional Atlas Sites

...Near Lincoln

Washington (AP)— Locations of 3 additional launching sites for the Lincoln, Neb., Atlas missile base have been selected by the Air Force, Sen. Carl T. Curtis (R-Neb) said Friday.

The base originally was scheduled to have 9 launching sites but plans to increase this to 12 were announced last month.

Curtis said he was advised by the Air Force that the 3 additional sites would be spotted at these general locations:

Cass-Otoe

—near Elmwood in Cass County 30 miles east of Lincoln; near Avoca in Cass County 39 miles east of Lincoln, and near Palmyra in Otoe County 23 miles southeast of Lincoln.

Each of the 12 launching sites is scheduled to be equipped with an Atlas missile.

Curtis said Army Engineers at Omaha will award a \$17,400,000 contract to Western Contracting Corp., Sioux City, Iowa, for construction at the first 9 sites.

Missile Pads in Cass, Otoe

3 More Atlas Sites in Lincoln Complex

World-Herald Washington Bureau,
1220-22 National Press Building.

The Air Force announced Friday the site of three additional Atlas missile launching pads for the Lincoln Air Force Base.

Naming of the actual sites follows by three weeks the announcement that the Lincoln base would have 12 pads rather than the nine scheduled originally.

Here are the locations of the three additional ones:
—Site No. 10 in Cass County 30 miles east of Lincoln, nearest community, Elmwood.

—Site No. 11, in Cass County, 39 miles east of Lincoln, nearest community, Avoca.

—Site No. 12, in Otoe County, 25 miles southeast of Lincoln, nearest community Palmyra.

The Western Contracting Corporation of Sioux City was the low bidder at \$17,400,000 for construction of base sites for the first nine launching pads. A contract was to be awarded to the firm this afternoon.

OMAHA DISTRICT
THE LINCOLN STAR, LINCOLN, NEBRASKA
19 April 1960

Engineers Let Lincoln Atlas Site Contract

Army Engineers in Omaha Monday announced award of a \$17,400,000 contract to Western Contracting Corp. of Sioux City for construction of 9 Atlas intercontinental ballistic missile launcher sites in the general vicinity of the Lincoln Air Force Base.

The engineers said it was agreed that if 3 additional sites are added Western will build them at a comparable cost to the government. The Air Force has confirmed its intentions to build a total of 12 but there has been no official notice to Army Engineers here.

A company spokesman said a fleet of earth movers was being shipped Monday from points in South Dakota, Michigan and Ohio to towns nearest the launching sites.

Completion of the contract is scheduled for May, 1961.

Work at each site involves construction of a reinforced concrete underground launch control center 30 feet deep and 40 feet in diameter, a missile silo 175 feet deep and 50 feet in diameter, fuel storage and handling systems and other facilities.

Crews Move to Atlas Jobs

Earth-Digging Fleet Is Lincoln-Bound

A fleet of earth-moving equipment was converging on the Lincoln vicinity Monday to begin construction of the Atlas missile installation.

A Western Contracting Corporation spokesman said at Sioux City that machinery was being shipped from jobs in South Dakota, Michigan and Ohio to begin the job.

First work will start next Monday, the spokesman said.

Western's announcement coincided with one by Col. David G. Hammond, Omaha District chief of Army Engineers, that the Sioux City firm had been awarded the construction contract on its low bid of \$17,400,000.

The contract covers construction of nine missile facilities. The Air Force has announced intention to enlarge the project to 12 missiles but there has been no official notice to Army Engineers.

The award ended a week of major bidding accomplishment for Army Engineers Missouri River Dams.

Dam in central Iowa and won than three million dollars for the first work on Big Bend Dam, submitted the low bid of \$1,400,000 for Red Rock Dam in central Iowa and won a major construction job on Dulles International Airport at Washington, D. C.

29 April 1960

Point Made By Atlas'

'Panic-Button'

Critics Rapped

The success of the Atlas ICBM program has borne out decisions to carry it through despite early 1959 failures, an Air Force spokesman said Thursday.

Col. Vernon L. Hastings of the Air Force Ballistic Missile Division told an audience at the Lincoln Aerospace Education Conference abandonment of the Atlas program would have been folly.

He noted there were 5 consecutive Atlas failures early in 1959.

"The Monday-morning quarterbacks and panic button pushers were out in full force, recommending that the Atlas program be cancelled in favor of the then new Titan missile," Col. Hastings said.

"The folly of such a course ... is now history."

Col. Hastings pointed out that in completing a successful Atlas operation shot in the fall of 1959, developers of the big missile far exceeded early timefables. Estimates made in 1954 predicted an operational ICBM in 6 to 8 years.

He said the proven range (6,300 nautical miles) and accuracy (within 2 miles) of Atlas exceeds early goals of 5,500 miles and accuracy within a 5-mile range.

Col. Hastings explained the science-industry-government "team" approach of developing the Atlas and its missions as both a weapon and a space exploration tool.

Al Higgins of Convair Astronautics, a major contractor on the Atlas, explained the engineering problems involved in activating Atlas bases.

OMAHA DISTRICT
LINCOLN SUNDAY JOURNAL AND STAR, LINCOLN, NEBRASKA
24 April 1960

Leading Space, Missile Authorities Will Speak Aerospace Education Meeting To Draw More Than 3,400

More than 2,000 University of Nebraska men and 1,300 students of higher education in the Lincoln-Omaha area are expected to attend the Lincoln aerospace education conference Thursday afternoon and evening.

Three of the nation's leading authorities on space travel and missile development will speak at Pershing Auditorium.

Dr. Frank Sorenson, director of air education at the University, said this program is a more intense offering with a central theme than that held Saturday at the Lincoln Air Force Base.

The public is invited.

Those attending will see an exact duplicate of the first Mercury capsule, designed to carry man into outer space.

This is the first showing in the Lincoln-Omaha area of the capsule.

The speakers are:

—Col. Vernon L. Hastings, USAF, who will speak on the development of the Atlas intercontinental ballistic missile at 3:10 p.m. Thursday;

—Al Higgins of Convair Astronautics, the expert responsible for the planning of all Nebraska Atlas bases, will speak at 4 p.m.;

—R. A. Fitzgerald of McDonnell Aircraft Corp., the makers of the nose cone and capsule, will speak at 8 p.m.

The aerospace education conference is sponsored jointly by the University of Nebraska units of the ROTC, the Nebraska National Guard and the U.S. Dept. of Defense.

A special aircraft, a C-119, will fly the capsule to Lincoln Wednesday afternoon. The capsule will be on display beginning Thursday afternoon at 1 p.m.

Atlas Pad Start Made

Ground Broken Near Beatrice

Beatrice — What will be a 178 ft deep and 60 ft. circular silo under the ground was started near here in an official Atlas missile ground breaking ceremony.

The location was the Paul Claassen farm about 5 miles southwest of here, one of the sites of the 9 launcher pads in the intercontinental ballistic missile system.

As representatives of the Omaha District, Army Engineers, the Western Contracting Corp. of Sioux City, Ia., successful contractors, watched as twin engine scrapers began the first 35-foot excavation of the area.

Malcolm Schaller, Western's representative, said this first step will take about two weeks. A shaft-sinking operation to excavate the remaining 134 feet will take another 4 to 6 weeks.

By another 9 weeks, all 9 sites in the missile area encircling Lincoln will be under construction, Schaller said.

Employment peak on the missile construction will come by September when the number should reach 500 to 600, Schaller said. Construction must be completed by next May in order that electronic installation by Air Force contracting firms may begin.

Offutt's 3-site intercontinental ballistic missile system at Mead, Arlington and Missouri Valley, Ia., has passed this point now and is slated to get its first missile weapon next week.

Al Higgins, Convair Astronautics Division representative at Omaha, said the weapon will be flown into Offutt Air Force Base May 6.

Ground Is Officially Broken For Ellis Atlas Missile Site

By Dean Terrill

Southeast Nebraska Bureau

Ellis—Paul Claassen's alfalfa field didn't look much different than at his last cutting.

The only hints that a monstrous new "silo" was being started—as one of 9 Atlas inter-continental ballistic missile sites around Lincoln Air Force Base—were the newly erected sign on Highway 136 and some heavy equipment for building an access road.

Barely a dozen persons, most of them newsmen and construction workers, stood in the rain Friday for what had been termed the official ground-breaking for all 9 sites. There were no bands, no speeches, no ribbons to cut.

Still, there was a solemnity to the occasion as Maj. Lester Henderson of LAFB reviewed for the press the standby function of the long-range missile. As he briefly described the 96-foot weapon, the Army field engineer explained that each site would have only one weapon—and one pre-determined target.

"The Atlas will only be fired in anger," he continued. "There will be no practicing."

M. G. Schaller, engineer for the Western Contracting Co. of Sioux City, Ia., said all 9 bases in the \$17.4 million contract are to be completed within a year. Construction also started Friday at the Cortland site, and 500 to 600 men should be working at all the locations within 8 weeks.

Henderson, field engineer for the Lincoln area of the Omaha district, said the "silos" housing the missiles will be 175 feet deep and 57 feet in diameter. A personnel tunnel about 50 feet underground

will connect to the launching control center.

There is a possibility that 3 more sites will be scheduled in the area soon, according to Schaller. Those already under contract (in the order work is to begin) are near Wilber, Eagle, Nebraska City, Tecumseh, York, Seward and Brainard.

It is expected that LAFB personnel will man the bases, perhaps being shuttled by

helicopter since there are no living quarters on the sites.

Although the Army is in charge of the steel and concrete work, the launchers will be turned over to Air Force personnel for electronic installation. No specific time has been announced for the bases to become operational.

Mason Travis will be project engineer. The site is in Gage County 3½ miles east of Ellis on Highway 136.



A rain-drenched alfalfa field and muddy earth-scraper made the dreary setting as the first work started near Ellis on the 9-site Atlas missile complex which will ring Lincoln. From left are machine operator Burl Martin, Maj. Lester Henderson and M. G. Schaller, engineer for Western Contracting Co. (Star Staff Photo)

2 Saturday, April 30, 1960—P.M. Lincoln Evening Journal and Nebraska State Journal

Missiles to Fire Only in Anger

'No Atlas Practice in State'

By Dean Terrill

Ellis — There are times when the grim implications of a man's work comes pretty close to home, even when he has worked in missiles since 1953 and done Army duty throughout the world a lot longer.

There was a seriousness in Maj. Lester Henderson's voice as he briefed newsmen on the Atlas missile site he was to oversee—less than 20 miles from where he once played soldier games at Holenberg, Kan.

As an Army field engineer working out of Lincoln Air Force Base, he will be responsible for construction at all 9 underground Atlas installations around Lincoln. Since the Ellis site is the first for work to get under way, informal ground-breaking ceremonies for the entire complex were held there.

"The Atlas will only be fired in anger," Maj. Henderson said. "There will be no practicing."

As he briefly described the 96-foot long-range missile, he stressed that each launcher will have but one—and only one—pre-determined target.

He and M. G. Schaller, Western Contracting Co. engineer, explained that 175-foot deep "silos" will be dug for each base included in the \$17.4 million contract.

Construction also started at the Cortland site, and 500 to 600 men should be working at all the locations within 3 weeks.

3 More Sites

There is a possibility that 3 more sites will be scheduled in the area soon, according to Schaller. Others already under contract (in the order work will begin) are near Wilber, Eagle, Nebraska City,

Tecumseh, York, Seward and Brainard.

All are scheduled for completion within a year, so Army Engineers can turn them over to the Air Force for electronic installation. No date has been announced for them to become operational.

One man for the missile base is even closer to home did not attend the ground-breaking. Paul Claassen, on whose land the installation will be dug $3\frac{1}{2}$ miles east of Ellis on Highway 136, said he is "personally opposed to that kind of retaliatory measure."

Not Very Happy

"And even if I had no moral scruples about the base, I wouldn't be very happy about losing my best 18 acres," he continued.

Like other neighboring farmers to whom offers were made for easements, Claassen did not accept them and is giving up the land through condemnation.

Then he added philosophically:

"Naturally we're concerned some about the danger also, but I guess we're no worse off than anybody else."



—World-Herald Photo.

Story below.
Rain-doused ceremony . . . Machine operator (left), Major Henderson, Schaller.

Rains Drench Missile Site

Brief Ceremony Held for First Atlas Silo

By Tom Allan

World-Herald Staff Member

Beatrice, Neb.—A giant earth-moving machine bit deep into the rich soil of a Nebraska farm five miles south of here Friday.

Flashbulbs popped. Then a handful of officials and reporters dashed for cover from the cold, pelting rain.

Thus was chronicled for history the start of construction of the first underground concrete Atlas missile nests in Nebraska.

175-Foot Silos

Other Atlas sites, at Mead and Arlington and Missouri Valley, Ia., are above ground. This was the first of nine sites of the Lincoln Air Force Base complex which will be hidden beneath the earth in concrete silos 175 feet—or more than half a block deep.

Huge gantries will raise the missiles above ground for firing.

"But they will only be fired in anger. There will be no practice," said Maj. Lester J. Henderson, United States Army Corps of Engineers field engineer for the Lincoln area.

Nine Sites

Malcolm Schaller, Western Contracting Corporation engineer, said the initial \$17,400,000 contract calls for the digging and construction of the silos, roads and other preparatory work for nine sites.

Major Henderson said the contractor has been given a year to prepare the nine sites. Each includes about 14 acres of land.

Then the Army Engineers will turn the sites over to the Air Force and Convair Astronautics Division of General Dynamics Corporation for installation of the multimillion-dollar control and firing hardware.

Farmer Not Enthused

The rain-doused ceremony Friday was just a formality. The digging began Tuesday.

Absent from the ceremony was Paul G. Cleassen, 43, the farmer on whose land missiles as well as corn will be planted.

Standing in his kitchen doorway listening to the roar of the earthmovers over the hill, he said:

"This farm has been in the family for three generations."

He forced a wry smile.

"No, I'm not very enthused about it."

Atlas Missile Said Worthy Of National Pride

By Louis Engel

"The Atlas missile is a working missile and is worthy of national pride," Colonel Vernon L. Hastings, Chief of Air Force Ballistic Missile Division at Offutt-Lincoln Field Office, told nearly 1,500 persons attending the aerospace education conference.

"The Atlas is a deterrent missile that is a reality," he

said. "All the goals of the Atlas have been met or exceeded," he added.

The Atlas will travel at speeds in excess of 23,000 feet per second, has a range of over 63,000 statute miles and has an accuracy of approximately two miles, he said.

"This accuracy is the equivalent of a rifleman hitting a

4 inch bullseye 15 times in a row at a range of a quarter of a mile," Hastings asserted.

The U.S. has made tremendous advances in the missile field, Hastings said. The first plans for an ICBM were proposed in 1953, he added. It was estimated that it would take from 8-9 years to develop the ICBM but it was

completed in 5, Hastings stated.

Alfred P. Higgins, manager of the Base Activation Convair Division of General Dynamics Corporation, told the group that there has been a tremendous scientific acceleration that has not been fully recognized in the business world.

Base Builders

Atlas Work Contractor Office Here

*Army Engineers
HQ at Air Base*

Western Contracting Corp. of Sioux City, Ia., builders of Lincoln's Atlas missile system, opened central offices Monday at 501 So. 7th in Lincoln.

Mason Travis, civil engineer, who will be project manager, said field offices also will be set up at each of the 9 sites.

It will take a staff of about 35 to 50 employes at the Lincoln central office, plus a site superintendent, administrative assistant, mechanical assistant and craft foreman at each of the field offices for Western to accomplish its May 23, 1961, deadline for completion of the 9 launcher pads.

One Unit at Mead

Also on the job during this first-part construction of the missile network will be Lt. Col. Hal Schroeder, area officer for the Omaha District Army Engineers, who are responsible for the work done by Western. Their office is located at Lincoln Air Force Base.

The Air Force Ballistic Missile division, which has contracted electronic firms to install the missiles and their special equipment, will have Col. Vernon Hastings as their liaison officer with Western and the Army Engineers. He will operate from Mead Ordnance Plant, Wahoo, where ballistic division offices were set up for the Offutt missile complex.

To Engineer
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Lincoln Atlas Complex May Have 15 Sites Possibility of Again Expanding Is Under Study

Washington—The possibility that even more Atlas ICBM sites may be added to the Lincoln missile complex has been raised here.

In secret testimony before the House Appropriations Committee, the Defense Dept. was asked to furnish figures on the total cost of increasing Atlas squadrons from 9 missiles to 15 and from 9 missiles to 12.

The Lincoln base, originally to have 9 sites, already has been expanded to 12, with an additional missile in reserve. The request for figures on an increase to 15 is the first hint that another boost may be contemplated.

\$46 Million Average

The average cost of construction of the present 9-missile Atlas bases is \$46 million, the Defense Dept. said. It also indicated that adding 3 missile sites to the 9-missile squadrons would not require additional appropriations.

Low bids received for the site construction were given as the reason the initially proposed \$90 million appropriation would now not be needed.

Western Construction Corp. of Sioux City, Ia., whose bid was under \$18 million for the 9-site system, began the basic construction several weeks ago.

Must Build 3 More

Their contract with Army Engineers, Omaha District

Office, provides Western must build 3 additional sites at a cost of construction for one of the original 9 launcher pads. Omaha Army Engineers still have not received directives to proceed with the 3 additional sites, though locations have been chosen.

The Defense Dept. noted that Lincoln is the location of the first "hardened" Atlas site. The Lincoln Atlas sites will be built to withstand 100 pounds per square inch of blast overpressure. This means that a missile could survive the explosion of a 10 megaton nuclear bomb dropped a mile and a half away.

OMAHA DISTRICT

INCOLN EVENING JOURNAL AND NEBRASKA STATE JOURNAL, LINCOLN, NEBRASKA
13 May 1960

Liquid Oxygen Plant Work Set

Construction is scheduled to begin within 10 days on a liquid oxygen plant at Lincoln

Air Force Base. This will be a part of this area's Atlas missile system.

A \$388,800 contract was awarded to the Cleveland Consolidated Division of the Cleveland Electric Co., Jacksonville, Fla., for the on-base job.

It must be completed by Oct. 15.

The work involves construction of two tanks of 28,000 gallon capacity each and a 50 by 100 ft. concrete block, insulated, metal siding structure.

The building will be used for the manufacturing of liquid oxygen and supplemental

manufacture of liquid nitrogen.

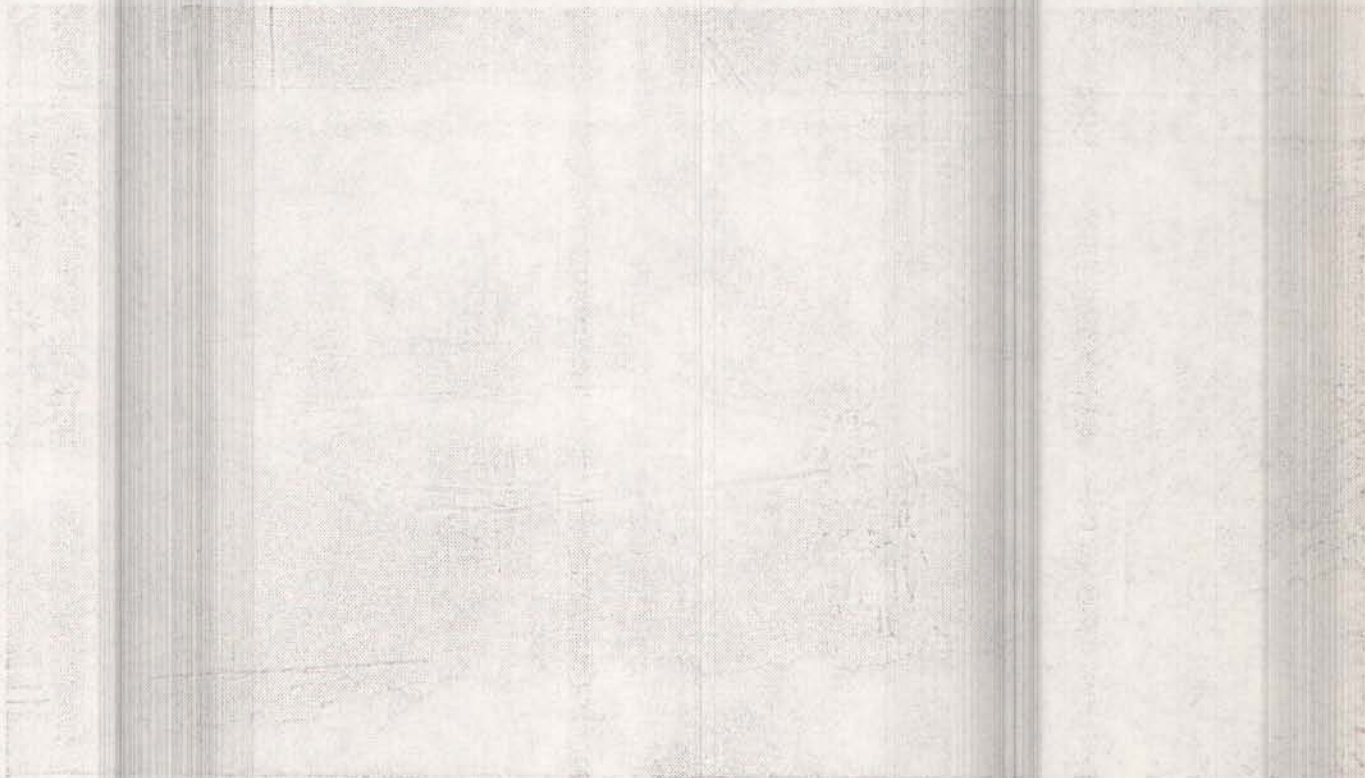
This facility and the tanks will be built on the north end of the base proper.

One tank will be used to store liquid oxygen and the other for liquid nitrogen. Both are for use in the Atlas missile system of 12 launcher bases and Atlas weapons scheduled in the Lincoln area.

OMAHA DISTRICT

LINCOLN EVENING JOURNAL AND NEBRASKA STATE JOURNAL, LINCOLN, NEBRASKA
19 May 1960

Atlas Construction Near Ellis



ATLAS CHASM DEEPENS FAST—It's been less than 3 weeks since ground-breaking of the Atlas ICBM site near Ellis, but earth-moving equipment has already opened a vast hole in which a 175-foot underground "silo" will be located. Flood lights were set up almost immediately, and 3 shifts of workers have made the project a round-

the-clock operation. A huge bowl some 35 feet deep has been scooped out, and work is about to begin on the vertical tunnel where the missile itself will stand in readiness. The iron-work which can be seen is a work collar and is not a permanent part of the installation. Ellis is about 10 miles southwest of Beatrice.

28 May 1960

Atlas Site Work Gets Good Start

Seven of 12

Going by Tuesday

Seven of Lincoln's 9 Atlas launcher sites should be under construction by Tuesday.

But the builders, the Western Contracting Corp. of Sioux City still have another 5 instead of two yet to get under way.

Mason Travis, project manager, said Western has been instructed to procure materials to build the added 3 sites. This makes a total of 12 un-

Missile Base At Kimball, Too

Page 6

derground silo intercontinental ballistic missile launchers ringing Lincoln.

Western made a successful bid on the 9-site system, but agreed to build the additional 3 if so directed by the Army Engineers.

Options Exercised

A spokesman for the Army Engineers also confirmed that options are being exercised on land at Palmyra, Avoca and Elmwood for the additional 3 launchers.

All 9 sites were to be completed and ready for electronic installation under Air Force supervision by next May 23.

"The 3 additional sites added will give us another 3 weeks," Travis said.

Western's personnel manager, A. S. Barker, estimates about 175 men are on the job now. A peak of 500 to 700 will be reached by July 15.

Local Labor

He said local labor markets thus far have filled Western's needs with the exception of heavy duty diesel mechanics, who "are rare" and usually have to come from Arizona and Ohio.

Travis says the men are digging their way down the 175 foot deep silos for the underground missiles.

"Then they'll cement their way back up," he explained.

Lincoln
Journal
8 June 60

Atlas Project Bids Sought

Bids are being sought for construction of the re-entry vehicle storage and inspection facilities at a Lincoln Air Force Base site in support of Lincoln's Atlas missile system.

Omaha District Office of the Army Engineers value the job at \$100,000. It must be completed by Mar. 15 of next year.

The job includes modifications to existing buildings, resurfacing 600 feet of flexible service road, furnishing and installing a 5-ton overhead crane and seeding and mulching.

Bids will be opened July 1.

THE LINCOLN STAR -
LINCOLN, NEBR.
6 June 1960

Construction On 'Atlas' Base Begins

York (AP) — Construction is underway on the Atlas Intercontinental Ballistic Missile base 5 miles west of York.

An earth moving crew is at work on preliminary stages of construction for the Western Contracting Corp. of Sioux City, Iowa, which has a contract to build 9 Atlas bases in the Lincoln area.

Einer Christensen, crew foreman, said 3 earth scrapers, two bulldozers and one motor grader are running 20 hours daily in the first construction stages of the underground missile site.

Christensen said the crew is digging a hole that measures 150 feet by 330 feet long at the top. At various depths, the hole will become smaller until at depth of 50 feet the "silo" will be dug to a depth of 175 feet below ground surface.

He explained that the silo, a concrete structure to house the missile, will have a 50 feet diameter.

Cheyenne Atlas "STAR" Site Officials 8 June 60 Clash On Delays

Cheyenne, Wyo. (UPI) — Atlas missile base contractors and officials of the George A. Fuller Company disagreed in part Thursday over the major cause of delays in completion of the Cheyenne area launching sites.

The contractor estimated that labor disputes have caused about 5 months delay, but the company official, who asked that his name not be used, said the labor stoppages were only a part of the problem.

The Fuller firm was prime contractor for Site A, one of 4 major sites, completed about Nov. 1, 1959.

The official said, "The missiles are so relatively new that some launching pad and building designs are not current."

He said the bases are being built under a crash program while changes are still being made in the Atlas.

Defense Secretary Thomas S. Gates ordered the Air Force to prepare a report this week concerning rumors that missile bases, including Warren Air Force Base and those sites around Offutt Air Force Base, are months behind construction schedules.

"Star" 8 June 60 'Battlefield Here In Next War' Says Air Base Official

Col. Frederick Marsh of the Lincoln Air Force Base told members of the Lincoln Optimist Club at a noon luncheon Thursday that "in the next war the entire United States will be a battlefield."

"Man must come to his senses and insist on disarmament and inspection but until then we must be prepared," he said.

Speaking on the topic "The Missile Weapon system at the LAFB", Col. Marsh explained the operation of missile bases and how they are constructed.

Marsh said that a missile site near Lincoln does make Lincoln a more strategic target but added "we must have defense".

"There is no danger of a miss-fire with the missiles," he concluded.

1 June 1960
Seward Missile
"The Lincoln Star"
Site Work Begins

Seward (AP)—Work has been started near Seward on the Atlas missile site. Ground was broken this week north-west of town.

Giant earth-moving machines started scraping out an oval hole which will reach 56 feet in depth by the middle of the month.

A shaft will be sunk 100 feet at one end of the oval.

Rains Slow Work At Missile Site

Nebraska City (AP) — The open cut excavation stage at the Nebraska City Atlas missile base is expected to be completed this week.

R. W. Feldhousen of the U. S. Corps of Engineers, who is in charge of the project, said though that work was delayed Saturday when the ground became too wet from rains to work.

In its present stage, the construction of the atlas silo is about 20 feet deep. The total depth will be 170 feet.

Feldhousen said the earth-moving job in the silo is expected to take about 4 to 6 weeks. After the job is complete, workers will begin pouring about 8,000 yards of concrete. *Star 13 June 60*

Journal - 15 June 1960
**Atlas Site Builders
Run Into 'Sand Trap'**

By Bess Jenkins

Nature, not man-made strikes, has placed a temporary stumbling block in construction progress at one of Lincoln's Atlas missile sites.

An Omaha District Army Engineers spokesman confirmed Monday that fine sand keeps caving in at the Beatrice site, where shaft mining has been in progress.

No soil difficulties were encountered in the initial 45 foot deep excavation at the site on the Paul Claassen farm 3½ miles east of Ellis and 3 miles south of Beatrice.

The sandy soil began collapsing as the men neared 75 feet. Total site depth is 175 feet, to be fully cemented from surface to bottom.

One remedial step being considered is the application of steel sheeting.

This would be installed against the sand walls in addition to the steel rings which are being used every 3 feet in all the Atlas silo launchers.

Meanwhile the initial above-ground excavation at the 8th and 9th of Lincoln's 12 Atlas bases was scheduled to begin this week. These are at Wilber and David City.

Mason Travis, project manager for the builders, Western Contracting Corp. of Sioux City, Ia., said sites 10, 11 and 12 (Elmwood, Avoca and Palmyra) also should have construction starts in the next 10 days.

Other sites at Seward, York, Eagle, Nebraska City, Tecumseh and Cortland are at various stages of excavation or the shaft mining.

Western Contracting Corp.'s personnel manager reports about 300 men now are on the job, compared to the 175 several weeks ago.

Machinists

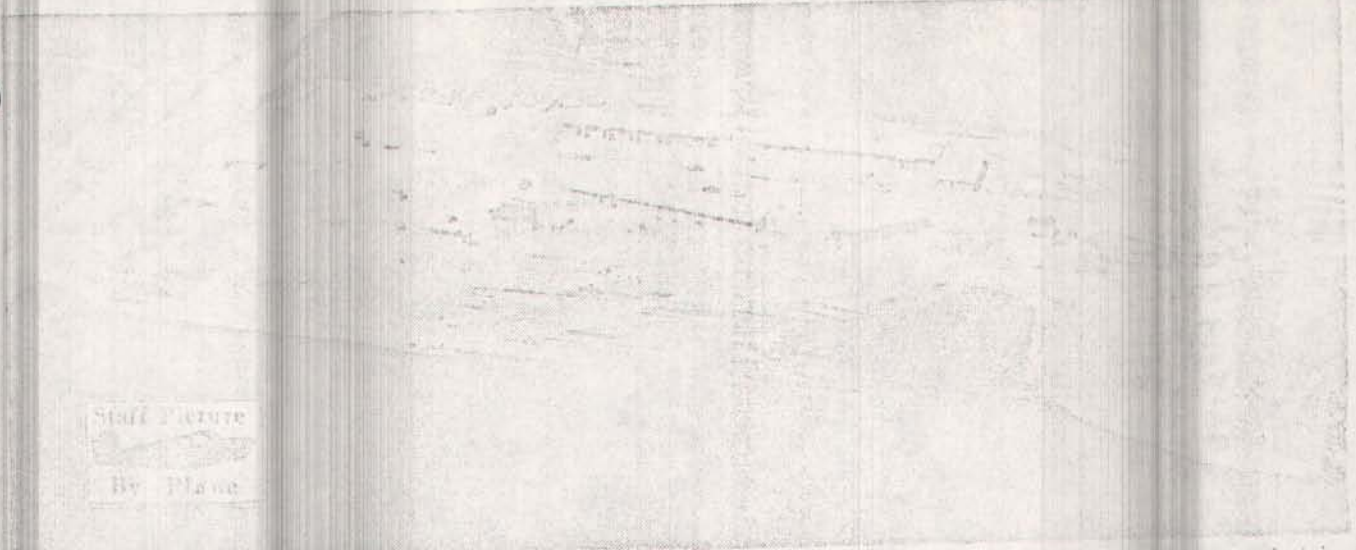
Still Off Jobs

Striking International Assn.
Home Office In

anapolis Life I

Distinguished Service to

139 Jan 1960



Staff Picture

By Name

NIKE SUPPORT AREA—Once completed by late July these buildings northeast of Crete along Highway 33 will provide the administration and housing support area for one of Lincoln's two Nike missile bases, now under construction. The Nike launching sites, not visible in this aerial, are to the left of the highway. This is known as the Berks base. A companion base is being built near

Agnew. The building in the upper left will house administration and the communications control center for the Army's defensive missiles. The upper right L-shaped structure is barracks, as is the long building in the lower left. The diagonal structure in the lower right is the squadron's mess hall. This aerial picture looks west.

Star 15 Jan 60

Cave-ins At Atlas Site Are Slowing Work

Construction of the Atlas missile site near Beatrice has been slowed by caving sand.

An Omaha District spokesman for the U.S. Army Corps of Engineers confirmed that fine sand keeps caving in at the site.

Shaft mining is in progress there on the Paul Claassen farm 3 miles south of Beatrice.

The difficulty was encountered as the men neared the 75-foot depth. Total scheduled silo depth is 175 feet.

Application of steel sheeting is being considered as a remedial step.

Meanwhile, initial excavation at two more of Lincoln's 12 Atlas sites is scheduled to begin this week at Wiber and David City.

Work is in progress at 7 sites.

Star 16 Jan 60

LT&T Heads To Visit Mead Atlas Site On Friday

The Board of Directors of the Lincoln Telephone and Telegraph Co. with officials and department heads, will visit the Atlas missile launching site near Mead on Friday.

The group will inspect the microwave communications system and the administrative telephone system at the site.

The Mead trip will follow the quarterly meeting of the board at Lincoln.

The group will meet for lunch at Wahoo with officers of the Ballistic Missiles Division located at the Mead installation.

Since 1952 the board has followed a policy of visiting various exchanges and installations in the company's 22 county operating territory.

Star 21 Jan 60

All Workers Returning To Missile Jobs

Mead (A)—A spokesman for Convair said Monday it appeared that all workers were returning to work at the Omaha missile sites following a vote taken on a new contract at Fremont Sunday.

The company spokesman said the ballots cast in the election Sunday were being taken to San Diego for counting and the results would be announced there.

He said indications were, however, that the vote on the contract was affirmative and the only workers not reporting for duty Monday were those prevented from reaching the site because of roads closed by high water.

The vote was on a new contract between Convair and the International Assn. of Machinists, ending a strike which had hampered work at the Mead and Arlington, Neb., and Missouri Valley, Ia., Atlas missile bases.

OMAHA DISTRICT

OMAHA WORLD HERALD
OMAHA, NEBRASKA
14 June 1960

Beatrice Silo Sand Shifting

Atlas Missile Shaft in Need of Shoring

Lincoln (UPI)—A stumbling block in construction at one of Lincoln's Atlas missile sites is the result of nature and not strikes.

Fine sand keeps caving in at Beatrice where shaft mining has been in progress, an Omaha District Army Engineers spokesman said Monday.

No soil difficulties were encountered in the first 45-foot excavation on the Paul Claassen farm 3½ miles east of Ellis and three miles south of Beatrice.

The sandy soil began collapsing as the workmen neared 75 feet. Total silo depth is 175 feet. It will be cemented from top to bottom. Use of steel sheeting is being considered now. It would be installed against the sand walls in addition to the steel rings which are being used every three feet.

The initial excavation at the eighth and ninth of Lincoln's 12 missile bases is scheduled to begin this week. These are at Wilber and David City.

Sites 10, 11 and 12 at Elmwood, Avoca and Palmyra also should have construction starts within the next 10 days, Mason Travis, project manager for the Western Contracting Corporation of Sioux City, Ia., said.

SIOUX CITY JOURNAL
SIOUX CITY, IOWA
14 June 1960

'Sand Trap' Delays Atlas Installation at Beatrice, Neb.

LINCOLN (AP) — Builders of the Atlas missile installation at Beatrice have run into a "sand trap."

An Omaha district army engineer spokesman confirmed Monday that fine sand keeps caving in at the site on the Paul Claassen farm three miles south of Beatrice where shaft mining has been in progress.

The difficulty was encountered as the men neared the 75-foot depth. Total scheduled silo depth is 175 feet, fully cemented from surface to bottom.

Application of steel sheeting is being considered as a remedial step.

LINCOLN EVE. JOURNAL & NEBR.
STATE JOURNAL, LINCOLN, NEBR.
11 June 1960

Atlas Site Work Begun at Seward

Seward — Work has been started near Seward on the Atlas missile site northwest of town. A shaft will be sunk 100 feet at one end of the oval.

Giant earth moving machines started scraping out an oval hole which will be 56 feet deep soon.

Star 21 June 68
**Ex-Employee Charges Work
On Missile Bases In 'Chaos'**

Omaha (AP) — Rex Breese, former employe of the George A. Fuller Co., charged Monday night work on 3 missile bases is in complete chaos in the Omaha area.

He declared there is little or no co-ordination, work is behind schedule, money and manpower is being wasted and there is political influence at work, he claimed in a statement over KMTV-Omaha.

Breese contended that it does not appear right now that the finished project will meet plans and specifications.

He declared he felt a Congressional investigation and a government audit should be made.

Breese is from Englewood, Calif. The Fuller company is nationwide contracting concern employed by the Corps of Engineers to help assure the earliest date.

Col. David Hammond, district engineer in charge of the projects, told KMTV that he was aware of "some broad allegations" and added "allegations of this sort are al-

ways thoroughly checked against the facts for whatever value they may have in the construction program."

Star 22 June 68
**FBI Investigating Accusations
Levelled At Missile Projects**

Omaha (AP)—Claims of a former employe of a consulting firm for the Atlas missile base project in the Omaha area that work on 3 missile sites in the Omaha area is complete chaos, and that he was offered a \$50,000 bribe to remain silent, are under investigation by the FBI, U.S. District Attorney William C. Spire said Tuesday.

Rex Breese, who recently resigned as assistant project engineer for the George A. Fuller Co. nationwide contracting firm employed by the Corps of Engineers to help assure completion of the project at the earliest date, made the accusations in a telecast over station KMTV, Omaha, Monday night.

Col. David G. Hammond, Omaha district Army engineer, replied the engineers' portion of the project is 98% complete and the Air Force has accepted everything but the propellant loading system, which still must be tested.

Breese claimed "there's definite political influence as well as an indication of graft and much buck-passing. He declared if the work continues without changes in management it will be question-

able whether the Air Force will accept the project. He said it does not appear the finished project will meet plans and specifications.

Tells Of Bribe Offer

Breese said in his television statement he received a bribe offer of \$50,000 "to take my people and get out of town," and has reported it to the FBI and to the office of special investigation of the Air Force.

Spire disclosed Breese's accusations have been under investigation for a month and a half and will be continued, but that "no charges have been filed or are contemplated at the present time."

Breese said he felt a Congressional investigation and government audit of the project should be made.

Breese, who is from Englewood, Calif., stated "It has been widely discussed that after the Corps of Engineers accepted the completed job at Warren Air Force Base in Cheyenne, other government agencies had to step in and spend much additional money and time to correct deficiencies there."

Col. Hammond replied he knows of no construction deficiencies at Cheyenne or Omaha that were not corrected by the contractor. He added that when a contractor fails to meet requirements of a contract, he is required to correct the deficiency at his own expense.

Hammond added "I know of no graft or political influence, but the FBI is investigating this aspect."

27 June 1960
LINCOLN EVENING JOURNAL
LINCOLN, NEBRASKA

Atlas Site Workers Return

Walkout 'Protest Against Conditions'

Working conditions at Lincoln's Atlas missile sites were given by a union business representative as the reason for laborers walking off the job over the week end.

However, these men had returned to work Monday morning with the promise that these conditions would be ironed out at a labor-management conference Thursday in Lincoln.

Bud Finnell of Omaha, business representative for the Hod-Carriers and Laborers union, said Monday the men were called off the job in protest.

He declined to enlarge upon the difficulties, but said "we had talked to the site superintendents and, to Mr. Travis about them."

Finnell said about 150 men working at 6 of the 12 sites in the system were pulled off the job Friday.

Travis, who said the walkout came without warning to Western, reported the laborers (miners) also started work on the Nebraska City site Monday. These miners are digging the 175-ft. silo-like vertical launchers into which the missile weapons will be placed.

The project manager reported he was informed Sunday noon by an international representative of the Hod-Carriers and Laborers Union that the men would come back to work Monday.

Missile Sites Struck

Miners off Jobs, May Be Back Monday

By Bess Jenkins

Labor difficulties now are plaguing the construction of Lincoln's Atlas missile system, it was learned Saturday night.

Mason Travis, project leader for Western Contracting Corp., of Sioux City, Ia., which is building the underground silo launchers for Lincoln's 12-site system, confirmed there are work difficulties.

About 120 miners, who are members of Local No. 1140, International Hod-Carriers And Common Laborers of America, have walked off the job.

These are men working in 3 8-hour shifts to dig the 175-ft. deep silos at sites one (Eagle); 3, (Tecumseh); 4 (Cortland) and 5 (Beatrice).

Another 30 Monday

Another 30 miners were to start Monday on site two (Nebraska City). Western now has about 350 employes on its payroll.

According to Travis, a business representative of the laborers' union showed up at the sites Friday night and ordered the miners to leave their jobs.

"Our superintendents at the sites tried to find out from Bud Finnell of Omaha, the union representative, why this order was being given, but Finnell would not give them a reason," Travis said.

'No Warning'

Travis reported, "We have not heard of any basic grievance or have had any reason to believe the men were unhappy. There was no warning of this walkout."

Western Contracting has communicated with international union representatives in Washington, D.C., and has been "told the men will be back on the job Monday."

The crews ordinarily work on Sundays, too, Travis explained.

He said the presence of Western's president, Garland Everett of Sioux City, in Lincoln during the day was a scheduled visit, and not precipitated by the labor difficulties.

Finnell Out of Town

Finnell, whom Travis said Western had tried to reach all day Saturday, was not in Omaha Saturday night.

A brother, Jack Finnell, said the union business representative was out of town. He said he knew nothing about the missile workers walkout but that "there were several laborers' strikes in southeast Nebraska, including one against William Brothers Pipeline in Nebraska."

It was only last Monday that workers covered by the bargaining unit of the International Assn. of Machinists Union returned to work at the Omaha missile system's sites at Mead, Arlington, and Missouri Valley after a two-week strike.

Star 27 June 60
**Atlas Strike
Ends At 12
Lincoln Sites**

Laborers who were ordered to leave their jobs at the 12 sites of Lincoln's Atlas Missile system Friday night were to go back to work "bright and early Monday morning."

Their return was confirmed by Mason Travis, project leader for Western Contracting Corp., of Sioux City, Ia., which is building underground silo launchers of the system.

Mason said he had contacted international union representatives in Washington, D. C., and was told the men would be back to work Monday.

"It wasn't actually a strike," Travis said. "No bona fide reason was given for the walkout," he added.

Bud Finnell, representative of International Hod-Carriers and Common Laborers of America, who ordered the men to leave their jobs, was unavailable for comment Sunday.

Finnell, of Omaha, was reported to be out of town Sunday.

The 120 workers who left their jobs were miners and members of Local No. 1140 of the union.

Star 28 June 60
**Atlas Missile
Site Laborers
Back At Work**

Atlas Missile site laborers returned to work Monday, following a walkout protest over the week end.

About 150 men working at 6 of the 12 Lincoln Atlas missile sites were pulled off the job Friday to protest working conditions, according to union representatives.

Bud Finnell of Omaha, business representative for the Hod-Carriers and Laborers Union, declined to elaborate upon the difficulties, but commented that workers returned to work Monday morning with the promise that the conditions would be ironed out at a labor-management conference Thursday in Lincoln.

Mason Travis, project leader for the construction contractor building the underground silo launchers, stated that the walkout came without warning Friday evening.

The laborers (miners) are digging the 175-foot vertical launchers in which the missile weapons will be placed.

OMAHA DISTRICT
29 June 1960

LINCOLN EVENING JOURNAL
LINCOLN, NEBRASKA



Shop Superintendent Carter . . . almost lost in tube turns and well fittings.

Missiles Need 'Plain' Items, Too, Like Pipe

By Dean Terrill
Southeast Nebraska Bureau

Cortland — The muscles of missiles depend partly on such common-as-an-old-shoe items as pipe — like the 30,000 feet which come out of a newly opened pipe fabricating shop here.

The Western Contracting Co. has set up quarters in the Cortland Lumber Yard to service 5 of the 12 Atlas bases near Lincoln with pipe for such "ordinary" uses as water, sewage septic systems and lubricating oil. Bases being constructed near Cortland, Beatrice, York, Seward and Wilber will utilize the pipe.

Unglamorous as the work might be compared to actual construction at the ICBM

sites, 14 welders and pipe fitters are already engaged in the necessary operation. Shop Supt. Bob Carter said he expects to be under full operation within two weeks and probably will remain open 14 months.

Miscellaneous smaller jobs for the bases will also be handled at the Cortland quarters. A similar shop at 9thwood will service the other 7 sites.

"JET SOOP" 1 July 1960

Ground Broken For Liquid Oxygen Plant

By Lt. Col. Frederick H. Marsh
Missile Weapons Officer

Ground breaking began on June 21 for construction of the new Liquid Oxygen Plant at Lincoln AFB. The plant will be built at the north end of the base on the southwest side of "B" Ave., near the railroad crossing.

This plant should be completed with a beneficial occupancy date for the Air Force of Oct. 10, 1960. It is scheduled to be operational and producing liquid oxygen by the end of the year.

This plant will have the cap-

ability of producing 25 tons of liquid oxygen every day.

It will provide all the liquid oxygen requirements for both the aircraft already stationed at Lincoln AFB, and the Atlas missiles which will be stationed here. It will replace the existing one-ton plant now located at the corner of Third Street and "F" Ave.

Liquid oxygen is produced by taking a large quantity of air and subjecting it to a series of compression, refrigeration, and filtering stages which separates the oxygen from the nitrogen and other elements in our atmosphere to give us the final product, a limpid colored, liquid oxygen of 99.5% purity at a temperature of -297 degrees F.

Because of the requirement to maintain this liquid at such a cold temperature, there is a certain amount of continuous loss through evaporation, even though vacuum storage and insulation is extensively practiced.

When the Lincoln AFB Strategic Missile Squadron is operational, it will be necessary to resupply each of the hardened missile sites about every ten days. This will be another of the responsibilities of the LOX Plant personnel. It is now estimated that about 28 airmen and officers will be assigned to produce, maintain and resupply the liquid oxygen.

At present there is still some question as to whether these personnel will be assigned to the Missile Squadron, itself, or augmented with Combat Support Group personnel.

Inspections Of Atlas Sites Being Made By Helicopter

Western Contracting Corporation is using a helicopter to speed work on Atlas missile site construction in the Lincoln area.

The new whirlybird flies supervisory personnel from its Lincoln project office at 507 So. 7th to the 12 scattered project sites.

Mason Travis, Lincoln manager for the Sioux City, Ia., firm, said the copter is pres-

ently based at Union Airport, but a landing spot closer to the office is being sought.

Emergencies

In addition to transporting supervisory personnel quickly to the various sites, the helicopter is also available for emergency situations.

Billy D. Keller of 3840 St. Paul, the corporation's pilot, is a veteran flier with 4,700 hours in helicopters and 2,500 in airplanes.

The 3-place Bell helicopter is radio-equipped and has night-flying gear. It can fly from almost zero speed to more than 100 miles per hour, and can land most anywhere.

Atlas Site 'Hardening' Funds KO'd

Washington (P) — House-Senate conferees Thursday knocked out funds to harden Atlas missile sites at Offutt Air Force Base, Neb.

The Senate had put \$1,872,000 into the military construction appropriation bill for the year starting Friday. It was not in the House bill.

A \$1,054,000 item for expansion of Strategic Air Command headquarters facilities at Offutt remains in the money bill.

SAC officials had requested the additional funds so the 3 Atlas sites surrounding the base could be hardened to withstand pressure of 25 pounds per square inch in the event of attack.

Each of the sites will house 3 Atlas missiles.

The conferees also agreed on \$173,000 for Army Reserve centers at Columbus and Norfolk and on \$120,000 for a National Guard armory at Crete and \$165,500 for a Guard armory at Beatrice.

Funds for the centers and armories have been voted by the Senate but not by the House.

Yawning Holes Mark Sites Of Lincoln Missile Complex

Yawning holes and vertical caverns, lined with metal circles resembling too many rings on one finger, now represent the 12 launching sites of Lincoln's Atlas missile system.

But a year from today, all basic construction work supervised by Army Engineers and being accomplished by

For War, For Peace Parade

Western Contracting Corp. of Sioux City should be finished.

Unlike the Cheyenne, Wyo., Atlas missile system featured in Parade today, the Lincoln launchers and the weapons for which they are being built won't be visible — unless they're being tested or fired for real. Each launcher in the system ringing metropolitan Lincoln will be underground in a silo-like nest.

One Missile

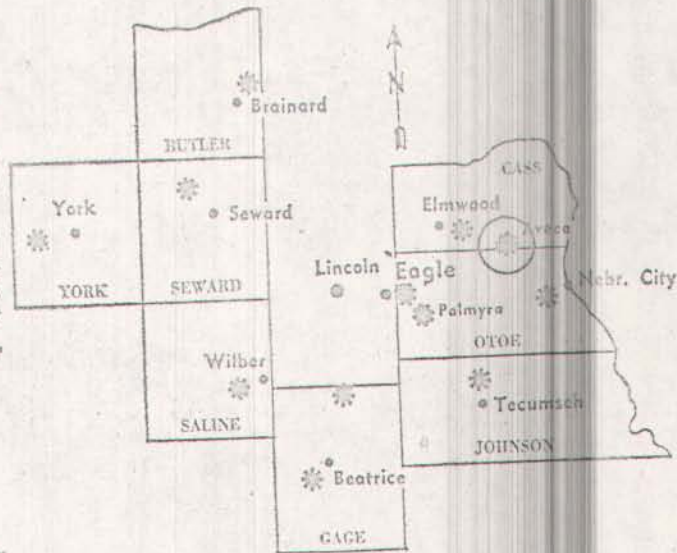
Unlike Cheyenne, too, there will be only one launcher and one missile at each of the 12 sites.

All of the launchers, with the exception of No. 11 which is 5 miles east of Avoca, are under construction now.

Site No. 5, about 3 miles south and 4 miles east of Beatrice, was the first launcher base started. But sandy soil slowed down its progress and Site No. 3, which is 3½ miles north and half a mile east of Tecumseh, is out in the lead.

120 Feet Down

Miners are 120 feet down the required 175 feet in the 225-ft. round cave at Tecum-



Missile sites in Lincoln area . . . all but one started.

sch, but only 70 feet down at Beatrice. The sandy Beatrice site is getting more of the 8 to 12-inch wide metal rings than the usual one every 3 feet to hold back the earth.

Once the bottom is reached, miners will turn over the job to concrete workers. They will line the silo walls with concrete ranging from two to as much as 9 feet in thickness. The silo top requires the 9 feet strength to support concrete hydraulic folding doors after they have been raised.

A 24-hour day, 7-day week has produced this site status on the remaining 9:

- Site one, 3 miles east of Eagle—miners down 30 ft.
- Site two, 4 miles east, 1½ mile north of Nebraska City—over 45 ft. excavation cut completed, mining started.
- Site 4, 2½ miles west, half mile north of Cortland—70 ft. down.
- Site 6, 6 miles east of Wilber—open 45 ft. cut just completed.
- Site 7, 5 miles east of York—open 45 ft. cut finished.
- Site 8, 5 miles east, two north of Seward—Ready for mining after 45 ft. open cut completed.
- Site 9, 3 miles northeast of Brainard—Open excavation completed, ready for mining.
- Site 10, two miles south, 4½ miles east of Elmwood—10 ft. of initial 45 ft. open cut made.
- Site 12, one mile south of Palmyra—Open excavation cut just started.

5th. 1960

Gates Wants Facts About Atlas Work

From Press Dispatches

Secretary of Defense Thomas S. Gates has ordered a report on allegations of delays in building launching sites for Atlas Intercontinental ballistic missiles which apparently relates to the ICBM sites at Offutt Air Force Base and Francis E. Warren Air Force Base, Cheyenne, Wyo.

A spokesman said Tuesday that Gates "has known and is concerned over reported delays in the Atlas site construction program and has directed the Air Force and other responsible officials to provide him with a detailed progress statement this week."

Rep. Glenn Cunningham (R-Neb) said he is aware of reports of construction contract trouble at the Offutt ICBM project.

Cunningham blamed the system of letting construction contracts, saying "this will always happen so long as the government uses the 'bid brokerage' system for contracts."

This should be replaced by a method of using a solid bid backed by a bond, Cunningham said, adding he has introduced legislation to establish such a system.

Tossing 195,000-Lb. Chunk Of Metal Is No Easy Job

By Don Wallon

It is no easy task to toss a 195,000-pound chunk of metal thousands of miles across the globe and bring it to earth within a mile or so of its target.

Yet, that is the job of the missilemen who have come to Nebraska to construct the complicated Atlas missile bases.

At Mead, one gets just a glimpse of the complex network of men and machines bound together from coast to coast in an effort to make the Atlas a success.

"Things are still being refined at Cape Canaveral while we're constructing here," Col. V. L. Hastings of the Air Force Ballistics Missiles Division told newsmen Wednesday.

"We're tied smack in with developments there," he pointed out.

'More Modern'

Progress at Canaveral is such that Atlas sites surrounding Lincoln will be even more modern than those not even yet completed around Offutt Air Force Base.

Lincoln sites, for instance, will be hardened (housed in underground silos).

In addition, Lincoln Atlas missiles will employ "inertial guidance," using the star Polaris for direction.

Atlas sites at Mead are above ground and make use of a radio control guidance system.

Construction at the Offutt complex (Mead-Arlington-Missouri Valley) is "pretty well on schedule," Col. Hastings noted.

Lagging, in addition to the propellant loading system, is the missile check-out area (a month behind) and minor projects.

The guidance system is two weeks ahead of schedule; communications is also ahead.

What's it take to build a base?

Among agencies working in co-operation at Mead are the Air Force Ballistics Missiles Division, Air Materiel Command, the U.S. Army Corps of Engineers, the Strategic Air Command, the Atomic Energy Commission, the Bureau of Mines and the Bureau of Roads.

Nine associate contractors and 13 sub-contractors are at work.

Employment has reached 2,300.

In addition to work on the sites (with 3 launchers each) a missile assembly plant, nose cone facility, technical supply area and a liquid oxygen generating plant are being constructed at Offutt.

How complex is the facility?

For instance, enough cable has been laid at Mead to stretch from there to Orlando, Fla., by way of New Orleans.

75 Cables

Seventy-five separate cables (with a total of some

2,500 wires) connect each launch house building.

Involved are approximately 25,000 cross connections.

How powerful is some of the equipment?

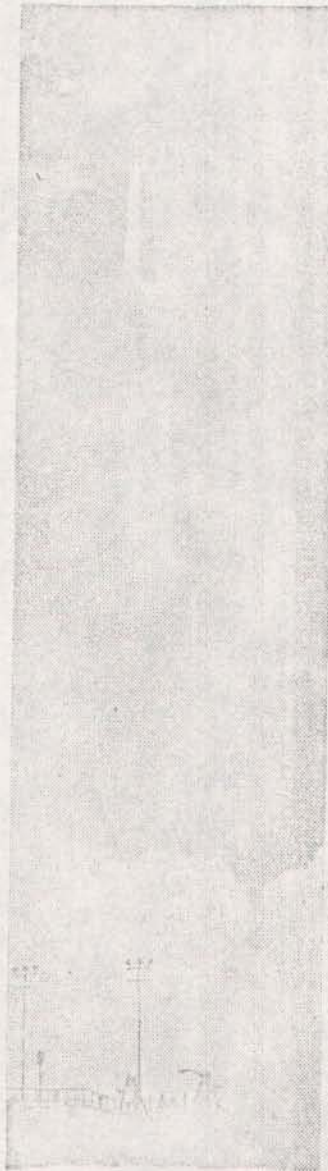
The missiles are fueled with liquid oxygen at the astounding rate of 3,500 gallons a minute.

How simple is it to send the monster missile roaring off its pad at speeds well over 10,000 m.p.h.?

There's a little white button at the bottom left hand corner of the control panel.

It triggers the killer, an 80-foot long mass of metal 9 feet in diameter.

It is marked "Start." And, it chills you to look at it.



ATLAS SOARS

"To be or not to be, that is the question." A question mankind hopes will never arise.

JULY 9, 1960 "LINCOLN STAR"

ATLAS BUILDING

DRAGS HEELS,

GATES REVEALS

Omaha, Cheyenne "Star" 9 Jul 60 Sites Far Behind

... NEW PROCEDURES ORDERED

Washington (AP)—The Pentagon acknowledged Friday that substantial delays have occurred in building launching bases for Atlas missiles.

Secretary of Defense Thomas S. Gates ordered that procedures of government agencies and contractors be "tightened up or changed."

The delays, primarily at two locations—Cheyenne, Wyo., and Omaha, Neb.—may set back by as much as 5 months the time when missiles could be used from those bases.

About 30 missile launchers out of a planned total of 130 are involved in the delay.

'Slippage'

An announcement said a meeting of Gates and top Pentagon officials was held Friday. It said attention was focused "on slippage that has taken place in the operational readiness dates" of the missile squadrons.

The official announcement blamed the delays on several factors.

These included a requirement to build the launching sites for actual operational use without having prototypes on which to pattern the new sites; some delay resulting from the steel strike of last year and management procedures.

This was the latest chapter

in an inquiry brought to light after a former contractor employe charged that work on 3 missile bases in the Omaha area was in what he termed "complete chaos."

Contractor Blamed

Army Engineer spokesmen in Omaha said at that time there had been construction deficiencies chargeable to the contractor but they were be-

Atlas sites scheduled to ring the Lincoln Air Force Base were not affected by Friday's announced delay.

ing completed by and at the expense of the contractor, the Malan Construction Co., of New York City.

Col. David G. Hammond, Omaha district engineer, who is the contracting officer for the projects, said the Malan company had sub-contracted more than 90% of the work.

"It is obvious that the problems of co-ordination and supervision of a construction project increase with a large number of subcontractors . . ." he said.

Maj. Gen. Keith R. Barney, Missouri River division engineer, reported that the work under the Malan contract is now about 98% complete.

When asked if the Pentagon meeting also included discussion of work stoppages at sites, a spokesman replied in the affirmative.

Conflicts

Unofficial reports of construction difficulties have mentioned conflicting directions from different military agencies, equipment incorrectly installed and jurisdictional disputes among labor unions.

The official statement said:

"Difficulties encountered in construction and installation and testing of equipment can be partly accounted for by the unique fact that the construction of sites for the first 4 squadrons was undertaken without the benefit of an operational prototype launcher such as will be available for later sites. Also some delay in the early squadrons was due to the steel strike of 1959.

"Management procedures of the Air Force, (Army) Corps of Engineers and their contractors are being reviewed and will be tightened up or changed. Further, with experience gained to date in construction, installation and checkout it appears that slippage should be confined to the first soft squadrons."

Workers Reach Bottom at Tecumseh Atlas Missile System Launch Site

Workers have reached bottom (175 feet below the surface) at one of the 12 launcher sites in Lincoln's Atlas missile system.

"We expect to begin cementing our way up at Tecumseh (Site No. 3) by this week end or early next week," project manager Mason Travis for Western Contracting Corp. said.

Pretaration work is necessary before concrete workers begin to cement their way back up the vertical cavern or silo.

All 12 sites of the Lincoln missile project now are in some phase of construction, with a new peak employment of 525 workers.

Travis said construction of the launch control centers, which are constructed beneath the earth at a 45-foot level, also has been started at 4 sites.

These include Tecumseh (Site No. 3); Eagle (Site No. 1); Cortland (Site No. 2), and Beatrice (Site No. 5).

15 July 1960
THE LINCOLN STAR
LINCOLN, NEBRASKA

BIDS ON MISSILE BUILDINGS TO BE OPENED AROUND AUG. 11

Army engineers will open bids about Aug. 11 for construction of missile assembly and technical supply buildings at the Lincoln Atlas ICBM Complex, Colonel D. G. Hammond, the Omaha district engineer, said Thursday.

The job includes building a single story 225 by 162 foot steel frame assembly building with metal siding, built-up roof on a wood deck and joists, and concrete slab floors. The technical supply building will be a one-story 200 by 88 foot addition to an existing building with specifications similar to those of the missile assembly building.

Also included are a wooden gatehouse, helium and nitrogen vessels with appurtenances, utilities, paving, fence-

ing and seeding.

Engineers estimate the cost at \$1,200,000 and will require completion 250 days after award of contract to the low bidder.

OMAHA DISTRICT

14 July 1960
THE LINCOLN STAR
LINCOLN, NEBRASKA

Huge Hole For Atlas Completed

...NEAR TECUMSEH

Workers have completed excavation of a hole 175 feet deep at one of 12 Atlas missile underground launching sites in the Lincoln system.

The bottom was reached first at Site No. 3 north of Tecumseh, according to Mason Travis, project manager for the Western Contracting Corp.

The hole, which will eventually house a continent-spanning Atlas ballistic missile, consists of a 136-foot shaft and an open cut 40 ft. deep, Travis said.

"By this weekend or early next week," he explained, work will start in preparation for pouring concrete.

That involves installation of reinforcing steel, framework, sumps and electric ground nets, Travis said.

Then workers will begin cementing their way up the sunken silo.

When they're done, 3,000 cubic yards of concrete, uniformly 30 inches thick, will have been poured, he said.

Travis also added that construction of launch control centers, buried 45 feet deep has started at 4 sites.

They are near Tecumseh, Eagle, Cortland and Beatrice.

Similar construction will be starting soon near Nebraska City, he added.

"JET SCOOP" 15 July 1960

Progress On Lincoln Area Missile Sites

By Lt. Col. Vance H. Larrabee
Missile Weapons Officer

Basic construction progress on Lincoln's 12 missile sites now range from a completed excavation, 180 feet in depth at Site Three, Tecumseh, to an initial open excavation cut recently started at Site Twelve, Palmyra.

The mining work at Tecumseh was completed last Sunday evening. It is the first of Lincoln's missile sites with the excavation phase complete.

Construction work is in progress on all sites by the Western Con-

tracting Corporation of Sioux City, Iowa, under supervision of the Army Corps of Engineers.

The construction program is monitored by the Air Force Ballistic Missile Division with field officers in Wahoo, Nebr.

Heavy equipment operations, utilizing two 11 hour working shifts, are in progress at Sites Eleven and Twelve where excavation cuts are being made.

This cut, the initial construction work, made in a rectangular area, 150 feet by 250 feet, slopes to a depth of 45 feet. It is similar to a large gravel pit.

When this site is complete, the site will be ready for mining operations, starting at the 45 foot level. The mining work, a vertical excavation to an additional depth of 135 feet with a diameter of 72 feet develops the Silo shape.

Excavation cuts are now complete on launch Sites Seven, Eight, Nine, and Ten, and mining, on a three eight-hour shift basis, is in progress at Sites One, Two, Four, Five, and Six.

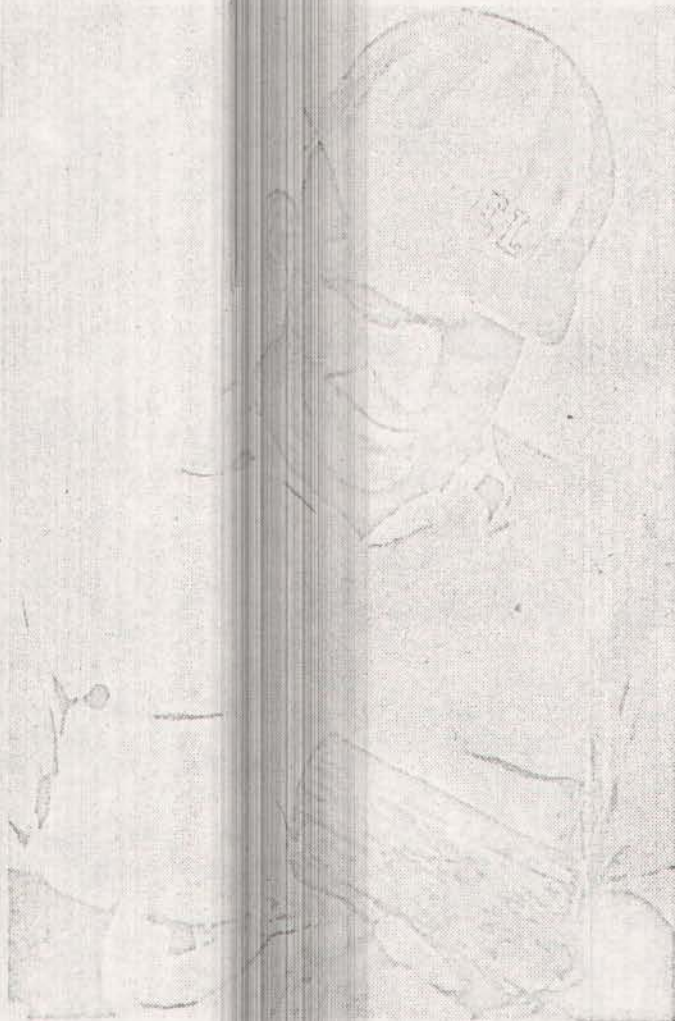
Reinforced steel bars were installed at Site Three, Tecumseh, this week in preparation for the cement work, known as the 'brick and mortar' phase, which is now underway.

This is accomplished in one continuous concrete pouring operation with an interior 'slip' form which is raised as the concrete is poured and hardens. This process takes roughly two weeks to complete.

Next, the two-story Launch Control Center is built above the ground in the open cut. When the launch control center, the top of the launch site silo and the interconnecting tunnel have been completed, the earth is filled in around these facilities, so that they will be completely under the final ground level.

It is expected that the basic construction of all Lincoln's Missile launch sites will be completed early next summer.

It Was Heck of a Dust Storm



Melvin Fricke . . . wood from way down.

Atlas Base Diggers Find Petrified Wood Mystery

By Dean Terrill
Southeast Nebraska Bureau

Tecumseh—Workers spearing 175 feet into the earth here for an Atlas sunken silo may have half-way expected to hit China, but instead they came up with something more mysterious.

Near the bottom of the just-completed shaft—in fact, at the 140-foot level—they uncovered particles of wood. A small piece is badly deteriorated, but a larger chunk appears to be partially petrified.

The finds have so aroused the curiosity of excavators that Melvin Fricke of Tecumseh, a crew foreman, plans to seek authoritative opinion on the whys and wherefores of the deeply buried pieces.

Some skeptical workers are now believers in the theory that the area was once a part of the Gulf of Mexico.

The semi-petrified wood showed enough flexibility that it apparently was severed from an unrecovered portion, Fricke said. The pieces seemingly came from some type of pine growth.

Western Contracting Co. just announced that the Tecumseh site is the first of its 12 ICBM bases in this area where excavation has been completed to the required 175-foot level.

Next step is the pouring of concrete, from the pit bottom upward.

A representative of the Smithsonian Institution of Washington, D.C., at the Institution's Lincoln office, said the find sounded very interesting but he would have to see it to say much about it.

Geologists of the State Historical Society and the State Museum were not readily available to express their opinions on the wood; presumably they were out digging artifacts of their own.

It is not unusual to find chunks of trees and pieces of wood which have been washed into some sands and gravels accumulated with water, according to Eugene C. Reed, director of the conservation and survey division of the University of Nebraska.

Reed, also the state geologist, said that the pieces of
Continued on Page 8

How Did Wood Get There?

Continued from Page 1

wood could be as young as 10,000 years or be as old as several hundred thousand years.

The wood, which was found in relatively good condition, was preserved by slowly moving water which keeps the wood from decaying, he explained.

Reed thinks by the beginning of next week the pieces could be given a carbon test, which can tell exactly how long it has been since the tree lived if it has not been longer than 50,000 years.

As to the Gulf of Mexico theory, Reed said much more information is needed to be sure.

"The only definite thing," he said, "is that the climate of that section of the state was cooler than it is now. There are very few natural pines growing there now."

The climate could have been like that of northwestern Nebraska around the Pine Ridge area near Chadron," he added.

OMAHA DISTRICT
16 July 1960

THE LINCOLN STAR
LINCOLN, NEBRASKA

Mystery Of Petrified Wood Develops At Atlas Base Site

Southeast Nebraska Bureau
Tecumseh — Workers prob-
ing 175 feet into the earth
here for an Atlas sunken silo
have come up with a mystery.

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Sprawling Base Multiplies Work

By Ralph Smith

Work Saturday was getting into the full-scale phase on a construction job that is sprawled over an area greater than that of Connecticut.

It is the new Lincoln Atlas missile base. Its 12 sites are scattered from York to Nebraska City and from David City to Wymore to encompass an area of 5,030 square miles.

This total is believed to make the Lincoln job, with its twin being built at Salina, Kans., the most sprawled-out project in engineering history.

The Lincoln job also is unusual in two other respects. It and the Salina project are the nation's first hardened—that is, underground—Atlas missile bases.

They also are the first unitary projects. Only a single missile is spotted on a single base. Elsewhere, as at Omaha, missiles are in clusters of three.

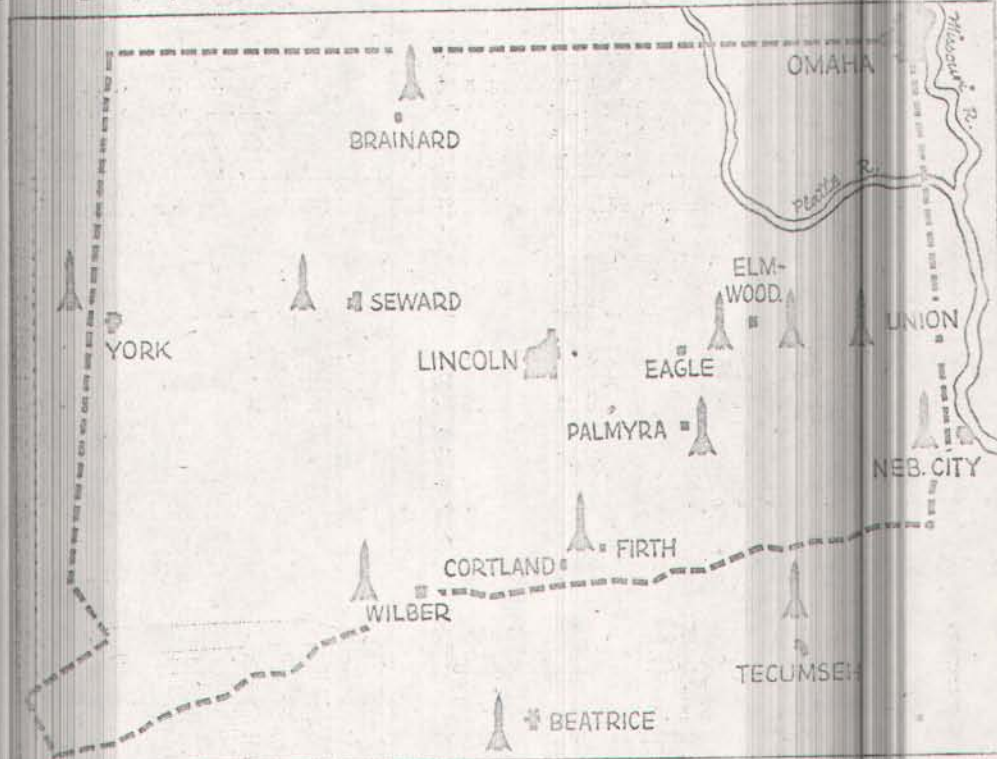
The job's sprawling nature adds to the construction problems of the Western Contracting Corporation. The Sioux City, Ia., firm holds the 23-million-dollar contract for the

Omaha District of Army Engineers project.

Mason Travis, Western's project manager, said that problems of supervision, equipment and scheduling all result from distance and area.

Supervision boils down to the difficulty of keeping in touch. To cover the job by car from Lincoln requires driving almost the distance to Chicago.

To tighten control, Western has assigned a three-place helicopter for supervisory heads. Two extra echelons of supervisory personnel have been inserted.



A big job . . . Map of missile sites with Connecticut's outline marked by dotted line.

ed in the organizational set-up. Two telephone lines run to each site and the whole—headquarters, cars and sites—are linked by a radio network.

The equipment needed is greater than that required for the three-missile bases, Mr. Travis said. Each site has to have its own complete set of machinery. In the contracting phase, the Lincoln job will require a 25 per cent greater saturation of machinery than a standard missile job.

Similarly, there will have to be individual concrete

mixing plants to serve each site. Mr. Travis estimated that this will boost cost for this item by 50 per cent.

The job will require eight unloading points rather than a single one. This in turn will multiply eight-fold the number of unloading hoppers, conveyers and cement screws used to unload railroad cars bringing in material.

Each installation consists of an underground silo, 175 by 52 feet, to house the missile, and a launch control center. This cheesebox-shaped underground struc-

ture is 40 feet in diameter and 30 feet high. In it is the equipment for servicing and launching the missile. Center and silo are connected by a 16-foot tunnel.

The sites are being constructed by cut and cover. Earth is stripped away in an egg-shaped cut four hundred feet in greatest dimension and from 35 to 57 feet deep. The control buildings are then constructed in the open and later will be covered with earth. The silos are dug downward from the bottom of the open cut.

28 July 1960

LINCOLN EVENING JOURNAL
LINCOLN, NEBRASKA



ARMY ENGINEERS CHIEF HERE — Col. Harry G. Woodbury Jr. (second from right), new Omaha District Army Engineers chief, is greeted at a luncheon meeting during his first visit to Lincoln. With him are (from left) Kenneth Weaver of Raymond, Salt-Wahoo Watershed District vice president; Earl Luff, chairman of the watershed's liaison committee to the Army Engineers, Col. Woodbury and Lt. Col. Hal L. Schroeder, area Army Engineer in charges of Lincoln's Atlas and Nike missile construction.

New Engineers Chief Talks Missiles, Floods

By Bess Jenkins

Man-made missiles and nature-wrought floods were major concerns of Col. Harry G. Woodbury Jr. as the new Omaha District Army Engineer made his first official visit to the Lincoln area.

This is the status reported Thursday by the new Army Engineers district chief:

"I believe we can give the Salt-Wahoo Watershed District a report sometime in September on our preliminary re-study of the Antelope Creek dam feasibility."

—"Some of the 12 sites in the Lincoln underground Atlas missile system are ahead of schedule, some are behind. We see nothing now that

would indicate our contracting firm, Western Contracting Corp., cannot meet its July, 1961, completion date, but we are exploring methods to catch up on our interim schedules.

—"Construction being done on the Nike-Hercules batteries at Berks and Agnew should be completed in a few weeks, and the first Army men will move in next week."

Woodbury, successor to Col. David Hammond, reported as chief of the Army Engineers' largest district earlier this month.

Meets Leaders

He met with members of the Salt-Wahoo Watershed District and several Lincoln civic leaders at a luncheon sponsored by Earl Luff. The latter is chairman of the watershed district's committee working with the Army Engineers.

"Maj. Gen. Keith R. Barney, the Missouri River division chief, has informed me of the urgency of the Salt-Wahoo project," Col. Woodbury said.

"I appreciate the general nature of your problem in the Antelope Creek Dam proposal and your desire to bring into focus the picture of urban development and long-range flood control," the colonel said.

He added, "I hope there can be some understanding and something can be done without waiting until a flood comes. Prevention, not cure, is indicated."

There has been some previous discussion that urban development property costs would not make the Antelope Creek dam feasible in the Salt-Wahoo program in the eyes of the Army Engineers.

Col. Woodbury said once the feasibility question is resolved, Antelope Creek Dam then would be returned as a part of the complete Salt-Wahoo project.

"I believe we will be able to adhere to the project schedule previously indicated by Col. Hammond," the new engineer chief said.

In referring to the Lincoln Atlas time schedule, Col. Woodbury said Garland Everist of Sioux City, Ia., president of Western Contracting, would be among the

Atlas building contractors and labor leaders attending a Pentagon-called conference Friday in Washington.

All 'New'

"We are new at building missile bases, 175 feet down in the ground; so is the Air Force; so are the contractors," Col. Woodbury said.

He indicated sandy soil and excessive water hit in some of the shaft mining were major reasons for the delay.

"Once these 12 silos are mined and lined with concrete, even bad winter weather should not hold up meeting the schedule," Col. Woodbury concluded.

Atlas Activation "Star" 30 Jul 60 3 Months Late

Omaha (U) — Col. Vernon Hastings estimated Saturday the Omaha Atlas missile installation will be ready for activation in late winter or early spring, 3 to 3½ months later than originally hoped.

Col. Hastings, commander of the Air Force Ballistic Missile Division's Omaha field office, said the guidance-control system is coming in as planned and will be ready by late fall. The delay comes in the launcher equipment, he said.

Mining at missile site "Nebr. City News-Press" 7 Aug 60 is nearing completion

Then will come concrete work in Atlas "silo."

The mining operation at Atlas missile site No. 2 west of Nebraska City is expected to be completed by August 15, according to Mason Travis, Lincoln, project manager for Western Contracting of Sioux City, Iowa.

The mining operation Saturday neared completion as crews worked in the deep pit with only 20 feet more of earth to remove to complete the job.

Mr Travis said after the mining operation is completed, concrete will be poured for a base slab in the bottom. Next will be installation of electrical grounding systems and reinforcing steel.

The next major job will be the pouring of concrete for the silo. The slab and walls of the pit will require 5,000 cubic yards of concrete. Added to that will be 2,500 cubic yards for miscellaneous structures.

Mr Travis, who is project manager for 11 missile sites in the area, said construction of the Nebraska City base will be completed by May 1961.

The jobs are being done in a step-by-step phase so that some bases will be completed before May and some later.

At present, the same earth moving equipment is being used at No. 2 to dig out that last 20 feet. Well pumps have been put into operation to keep water out of the pit.

The pumping operation is considered normal, Mr Travis said.

The total depth of the silo will be 175 feet. The actual depth of the silo before fill is put in will be 136 feet. After the concrete silo is poured that 136 feet, earth from the original egg-shaped cut will be moved back to the cut, more concrete poured and the end result: a 175 foot deep silo.

Western has 55 men working on Site No. 2. Crews are working 24 hours a day.

The Iowa firm will be working on the site until August, 1961, Mr Travis said Saturday.

Atlas Mining Work Nears Completion

Nebraska City (P) — Crews working around the clock are nearing completion of the mining operation at the Atlas missile site No. 2 west of Nebraska City.

Mason Travis of Lincoln, project manager for the western contracting company of Sioux City, said this phase of construction should be completed by Aug. 15.

Once the mining operation is completed, Travis said, concrete will be poured for a base slab in the bottom and an electrical grounding system will be installed.

OMAHA DISTRICT

6 August 1960

THE LINCOLN STAR
LINCOLN, NEBRASKA

Missile Fuel Hauling Rates To Be Fixed

A California trucking firm has been authorized to establish rates for hauling missile fuel to launching sites in Nebraska, the State Railway Commission reported Friday.

The firm, Asbury Transportation Co. of Los Angeles, will employ special, expensive equipment and specially trained personnel for the job, a commission spokesman said.

It will transport cryogenic liquids and/or liquefied gases, except propane and butane. The point of origin of the fuel is unknown.

In other action related to missile sites, the Commission set a hearing for Aug. 9 on a motion to strike an application of the S and S Construction Co. of Olathe, Kan., for a ruling relative to the construction for and leasing to the U.S. Air Force of an underground communications system for the Lincoln missile complex.

Jurisdiction

The question is whether the Railway Commission has jurisdiction over the system as it would over common carriers.

Nineteen Nebraska general commodity motor carriers have requested the Commission to grant a flat \$3.06 minimum charge for any shipment to replace the graded scale under which the minimum charges range from \$2 to \$2.75, depending on distance. The Commission set a hearing for Oct. 18 on the request.

The Commission granted to all Nebraska railroads an increase in rates amounting to 10% on shipments of less than 2,000 pounds, effective Aug. 13. Motor carriers were recently granted a similar increase.

The Railway Express Agency of Omaha was authorized to close its express facilities in the Chicago, Burlington & Quincy depot at Plattsmouth and re-establish service at the Missouri Pacific office in the same city.

Discontinue Agency

The Burlington was authorized to discontinue its agency at the station of Odell.

The Benkelman Telephone Co., Inc., of Benkelman, was granted authority to issue \$75,000 in 6% first mortgage bonds and adjust rates and charges for telephone service.

Northwestern Bell Telephone Co. of Omaha was granted authority to establish rates for a new type of dial private branch exchange service arranged for direct inward dialing.

The original base rate area map for Gretna was also approved for northwest, as were other minor map revisions.

The hearing originally set for Aug. 16 on an application by the Hyannis Telephone Co., Hyannis, to borrow \$46,000 and adjust rates following cutover to a proposed new dial switchboard was reset for Aug. 23 at the applicant's request, the Commission reported. It will be held in the courthouse at Hyannis.

Atlas Construction Lag Triggers Probe

Washington (UPI) — The House Military Operations Subcommittee is considering a full-scale investigation to discover why construction of some Atlas missile bases is lagging by as much as 3 or 6 months.

The subcommittee hopes to begin hearings within the next few weeks on the potentially serious delays in the building of the launching pads for the Intercontinental Ballistic Missiles.

Subcommittee Staff Director Herbert Roback told United Press International that Chairman Chet Hollifield (D-Calif.) hoped to schedule the hearings either during or immediately after post-convention session of Congress.

Roback, just back from an investigation of building delays in the Atlas complex at Offutt Air Force Base, Neb., said the subcommittee planned to study all facets of the Army Corps of Engineers-Air Force management team responsible for building the launching pads.

"If you don't have a launching pad," he said, "what's the good of a missile?"

Way Behind

The subcommittee staff director said the first part of the Offutt missile set up originally was scheduled to have been finished last February with the entire job completed last May.

Air Force officials, Roback said, now hope to have the Offutt pads "substantially finished" in September.

He said similar construction lags had been admitted by the Air Force at Warren Air Force Base, Wyo., and Vandenberg AFB, Calif.

Roback said the subcommittee planned to question defense officials on their contracting procedures.

He said there was some question whether such a vital program should be handled by completely open bidding and whether the Defense Department should establish a

list of qualified contractors before opening negotiations.

The government has announced that launching facilities for 13 Atlas squadrons will be constructed at 11 bases in the United States at a cost of roughly \$390 million.

The Defense Department, Roback said, has announced that construction of 6 out of the 7 missile squadrons started during the last fiscal year, which ended June 30, are either on or ahead of schedule.

Atlas facilities also are being constructed at Fairchild Air Force Base, Wash., Forbes AFB, Kan., Schilling AFB, Kan., Lincoln AFB, Neb., Altus AFB, Okla., Dyess AFB, Tex., Walker AFB, N.M., and Plattsburg AFB, N.Y.

"Star" 10 Aug 60 3 Atlas Posts Turned Over To SAC Men

Omaha (UPI)— Three Atlas Intercontinental ballistic missile site launcher positions at Francis Warren Air Force Base, Wyo., have been turned over to the Strategic Air Command 564th Missile Sq., SAC announced Tuesday.

The 3 positions have been accepted from the Air Research and Development Command by the Strategic Air Command and declared operational by Gen. Thomas S. Power, SAC commander.

Gen. Power said the missiles have been placed in alert status along with SAC's B47 and B52 bombers and the Atlas ICBM's at Vandenberg AFB, Calif.

The new facilities will be manned by personnel of the 564th Strategic Missile Squadron, commanded by Col. Julius Pickoff of Manor, Tex.

Warren AFB is the second SAC base to have operational capabilities with the Convair-built Atlas ICBM. Vandenberg AFB, the giant missile training center, has had the Atlas on alert since September, 1959.

1,100 Working On Atlas System

Western Contracting Corp., builders of Lincoln's underground Atlas missile system, now have 1,100 workers on the job.

The employment peak still is to be reached—some- where around 1,500—before basic construction is completed at all 12 launcher sites by next July.

★ ★ ★ Missile Meet Held

Col. Thomas Corbin and Col. William H. Working represented Lincoln Air Force Base at Strategic Air Command's first all-exclusive missile conference at Ofutt SAC headquarters.

Col. Corbin is air division commander; Col. Working, base commander.

Where missile squadrons are not yet on operational status, division and base commanders represented the scheduled missile areas. Numbered Air Forces with bases slated for missile complexes also sent representatives.

Mason Travis, Western's project manager here, said the phase sequence schedule at the sites now has shifted to concurrent operations at all 12.

11 of 12 Sites

Mine shafting operations are in progress at 11 of the 12 sites.

The 175 feet underground silo already has been completed at Site No. 3 (Tecumseh) and a 60 ft. in diameter base slab finished.

Reinforcing steel and imbedded metals are being installed along the sides of the 175 foot hole before concret- ing the walls all the way back up.

Site No. 2 (Nebraska City) and Site No. 9 (between Brainard and David City), should be ready for the base slab operations by next week, he said. These concrete slabs are 4 feet thick.

Wichita Firm Bids Low On Missile Bldg.

Omaha, Neb. (UPI) — The Martin K. Eby Construction Co., Inc., Wichita, Kan., was the apparent low bidder for construction of a missile assembly and technical supply building at the Lincoln Air Force Base, the Omaha district of the Army Corps of Engineers announced.

The Kansas firm underbid 9 other companies in some of the closest bidding in the history of the Omaha engineers district.

The Eby firm's bid was \$913,622, compared with the government estimate of \$1,075,100.

The engineers will award the contract within a week or so. The work will start within 10 days after the contract is awarded and must be completed within 250 days.

The building will be part of the support facilities at the Lincoln base for an intercon- tinental ballistic missile unit.

General sees no more delay

Base activation is discussed at secret SAC meet

By WILLIAM T. BRAMMEIER
United Press International

**OFFUTT AIR FORCE
BASE (UPI)**— The man in
charge of hurrying the na-
tion's Intercontinental Bal-
listic Missile Bases into oper-
ational state predicted today
there would be no further de-
lays.

Maj. Gen. Thomas Patrick
Gerrity, Commander of the Air
Materiel Command's Ballistic
Missile Center told a news confer-
ence at Strategic Air Command
Headquarters here this morning
that from now on the Air Force
would be catching up with its
schedule.

Gerrity, whose headquarters are
at Ingelwood, Calif., held a con-
ference today with the command-
ers of the 20 SAC bases which
now have or will have ICBM
installations.

During the secret conferences,
problems of activating the bases
were discussed and commanders
of bases which have yet to re-
ceive their first "birds" were
briefed on what they can expect
when their bases become opera-
tional.

Integrate the Team

Gerrity described his job to
newsmen as integrating the team
of industry and the military to
deliver operational missiles to the
bases. "I feel we have a very
good team," he said, "and this
team should be able to catch up
with the schedule without any
further slippage."

One of the big problems, he
said, is changes in production
orders. He said this will not
cause any delay, but the change
orders will continue when needed.

"We are constantly seeking to
provide better missiles and mis-
sile sites for our country. To do
this, we must incorporate any
improvements into the production
as they come along."

Problems Are Similar

The 57-year-old general said
the problems he faces in the
missile race are similar to those
which confronted him in integrat-
ing the B-29 bomber production
during World War II. But here,
he said, "The production line is
10,000 miles long — with one
thousand production centers all
over the nation producing compo-
nents of missiles."

"STAR" 12 Aug 60 Super Missile Housekeeping Facilities Set

Mead (AP) — Super cleaning
facilities have been set up
here to serve missile bases
now under construction.

The on-the-spot housekeep-
ing functions are designed
to eliminate bits of dirt,
dust specks, grease smudges
and other minute foreign sub-
stance in the complex missile
mechanisms.

The Mead facility is one of
a number established by the
Dow Chemical Co.'s indus-
trial service.

The rooms where the clean-
ing is done are kept under
slight air pressure and dust-
free. They are entered
through air-locks by workers
who wear white, lint-free
dress, head covers, foot cov-
ers and plastic gloves. Bare
hands never touch the parts
being cleaned.

The Mead facilities are suit-
ed for cleaning valves, pres-
sure regulators, expansion
joints, flexible tubing, instru-
ments and pipe.

10,000 Mile Production Line Involved, Says Gen. Gerrity

Omaha (AP) — The general charged with getting the nation's operational ICBM program back on schedule Friday described the problem as one of a "10,000-mile production line" and a compressed schedule.

The line includes the whole complex missile production, from manufacturing plants to launching bases, said Maj. Gen. Thomas P. Gerrity, and involves bringing together all the operational parts at the right time.

Does he anticipate further lag?

"I anticipate catch-up," declared Gerrity, chief of the Air Material Command's bal-

listic missiles center at Inglewood, Calif.

The general, here for a Strategic Air Command conference of missile commanders, was named boss of ballistic missile site activation as a result of a lag in completing sites for the already operational Atlas missile.

Because it is nearly completed, the Offutt Air Force Base Atlas project is not under Gen. Gerrity. However, the Lincoln AFB Atlas project is his responsibility.

And there, he said, "We intend to make the schedule." He did not visit Lincoln Friday, but of that missile base project and others like it, he added:

"You can rest assured I'll be back often to see them."

The problem is not one of avoiding changes in the missile program—"this is a business of change," he told a news conference. "It is a question of coping with change."

He compared the ICBM program with the World War II project to develop, manufacture and get into combat the B29 bomber.

Gen. Gerrity declined comment on the specifics of speeding up the missile base program except to say that as a beginning "we've welded together a tighter team."

OMAHA DISTRICT

13 August 1960

THE LINCOLN STAR
LINCOLN, NEBRASKA

Saturday, August 13, 1960 The Lincoln Star 9

1,104 MEN WORKING ON LINCOLN ATLAS SYSTEM

A total of 1,104 men are presently helping to build Lincoln's underground Atlas missile system.

But these aren't all the workers.

According to Mason Travis of Western Contracting Corp., builders of the missile system, a peak of about 1,500 workers is still to be reached by the end of construction expected to come next July.

Progress: Normal

Travis said construction work is progressing at a normal rate.

Shaft mining is being done in 11 of the 12 locations.

Workers are now preparing to pour concrete for the shafts at the Tecumseh site.

Concrete is being poured for launch control centers at Eagle, Nebraska City, Tecumseh, Cortland, Beatrice and Wilber.

November through March of 1961 crews will be erecting structural steel, installing mechanical and electrical equipment and propellant loading systems.

Concurrent work operations are being carried on among all 12 missile sites, Travis said.

Wichita Firm
Low on Unit Here

Omaha — The Martin K. Eby Construction Co. of Wichita, Kan., with a bid of \$913,622 was apparent low bidder to construct Lincoln missile system's checkout facility for actual weapons.

Ten bids were opened by the Army Engineers' Omaha District office late Thursday.

Two Lincoln firms were Kingery Construction, submitting a \$1,038,888 figure, and Olson Construction Co., bidding \$1,054,189.

An Engineer spokesman said there was only a \$226,000 difference between the lowest and highest bids.

Army Engineers estimate for the job was \$1.2 million. The contractor will be given 250 days after contract awarding to complete the project.

The job includes construction of a single story 225 by 162 ft. steel frame assembly building at Lincoln Air Force Base.

This is the structure in which each of the missile weapons destined for the 12 launcher sites in the Lincoln missile complex will be checked out.

A technical supply building in the contract is a one-story, 200 by 88 ft. addition to an existing building. Also included are a wooden gatehouse, helium and nitrogen vessels, utilities, paving, fencing and seeding.

13 Aug 60

Lincoln
STAR
13 Aug 60

Lincoln Journal
12 Aug 60

Construction of the Atlas missile base (Site No. 2) west of Nebraska City will soon be in the

concrete pouring stage. The large hole is the actual silo and will be about 175 feet deep. The

other construction in the upper part of the picture is the control center. Both construction areas

are about 40 feet below ground level.

★ ★ ★ ★ ★ ★ ★ ★

Concrete pouring to start at missile base on Monday

The first of the concrete pouring at Atlas missile site No. 2 west of Nebraska City will get under way Monday.

The concrete will be poured in the control center, heart of the Atlas base.

On hand to direct operations are Herschel Donoho, general superintendent for Western Contracting Co of Sioux City, Ia., and Kenneth Lauritsen, resident engineer for the U.S. Corps of Engineers.

The actual earth moving job in the silo is nearly completed. Only 12 feet of earth has to be removed before the mining crews finish their big job.

The last 24 feet have been sand and it has been

der what will be the bottom of the silo.

During present construction, mining crews have put in the 40th ring beam and have four more to go before hitting bottom. In between the steel beams, which weigh 120 pounds per foot, crews are placing lagging. A ring beam weighs 21,000 pounds.

Oak wood serves as support to keep the dirt and sand walls from caving in. Workers will have 12 50-horsepower water pumps taking water out. The machines each pump 400 gallons of water per minute.

The actual concrete pouring job for the base will require 7,500 cubic yards, according to Mason Travis, project manager for Western.

Western has removed an estimated

the silo and an estimated 45,000 to 46,000 cubic yards of earth from the open cut.

Two mats of steel will be placed on the bottom of the silo before concrete is poured.

Reinforcing steel bars that will be placed in the silo walls are two and one-quarter inches in diameter. The concrete walls of the silo will be three feet thick.

An estimated 400 tons of reinforcing steel will be used in the silo.

Slabs up to four feet thick will be poured in the control center and silo. When the jobs are nearly completed, all the earth from the open cut will be moved back around the structures giving the countryside nothing in the way of

OMAHA DISTRICT
16 August 1960
OMAHA WORLD-HERALD
OMAHA, NEBRASKA

Missile Sites Job Doubles

Lincoln Work Added for Col. Hastings

Col. Vernon L. Hastings, in charge of preparing Omaha area Atlas launch bases, also will direct the work of activating the 12 intercontinental ballistic missile sites to be supported by the Lincoln Air Force Base, the Air Force announced Tuesday.

In this activity he will work directly under Maj. Gen. Thomas P. Gerrity, whose Air Force Ballistic Missile Center recently was given the job of expediting the Atlas base program to an early completion.

Activities of Colonel Hastings in regard to the Omaha area base work are expected to remain under the Air Force Ballistic Missile Division, which is part of the Air Research & Development Command.

General Gerrity's organization is a unit of the Air Materiel Command.

Colonel Hastings will command the Air Materiel Command and the Air Research & Development Command detachments in the Omaha and Lincoln areas. These will be grouped into the Offutt-Lincoln Site Activation Task Force.

Colonel Hastings has been in charge of Omaha area missile work for the past year.

He is a native of Table Rock, Neb., and a former resident of Aurora, Neb., and Lincoln.



—World-Herald Photo.

Story at left.
Hastings... native of state.

OMAHA WORLD-HERALD
OMAHA, NEBRASKA

17 August 1960

Missile Man

Col. Vernon L. Hastings, in charge of preparing Omaha area Atlas missile bases, was named to direct the activation of the 12-missile Lincoln Atlas installation. He will work directly under the Air Force Ballistic Missile Center.

High Brass to Survey Area Missile Sites

By Bess Jenkins
Lt. Gen. E. C. Itschner, the Army Engineers' No. 1 man in Washington, D.C., heads a party of Army and Air Force generals scheduled to arrive here Thursday night to look over Lincoln intercontinental ballistic missile sites.

An Omaha District Army Engineers spokesman said this will be Gen. Itschner's first visit to Lincoln in several years and his initial inspection of the area's completely-underground missile system of 12 launcher sites ringing Lincoln.

It was explained that Gen. Itschner regularly plans to visit all the missile bases which are being constructed

under Army Engineers' supervision.

Next to Kansas

After spending Friday touring at least 6 of the 12 launcher sites here, General Itschner is scheduled to go to Safford, Kan., where another similar underground Atlas system of 12 launcher complexes is under construction.

Mason Travis, project manager for Western Construction Corp. of Sioux City, Ia., builders of the Lincoln missile system, Wednesday described the building overall schedule about as it should be at this date.

"We are on schedule on some sites, ahead on others and delayed some on a few-

where we have run into sandy or water-soaked soil," Travis said.

There are 1,127 men on the project now, Travis said, with the anticipated peak of 1,500 expected in "about 30 days." Construction under Army Engineers' contract must be completed on all 12 sites by July, 1961, Travis said. After this date, installation of electronic equipment under Air Force supervision will begin.

Top Brass

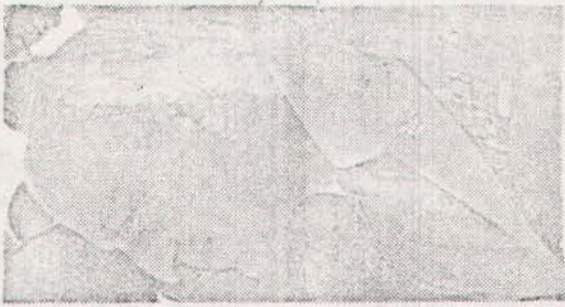
The Omaha District Engineers spokesman said the visiting party will be made up of top brass from both the east and west coasts.

In addition to Gen. Itschner, the group includes:

Maj. Gen. A. M. Minton, director of civil engineering for the Air Force in Washington, D.C.; Brig. Gen. Alvin C. Wellington, newly-designated commanding general of the Army Engineers Ballistic Missile construction office in Los Angeles; and Brig. Gen.

Christian F. Dreyer, Joseph E. Gill and William Leonhard, all with the USAF.

Joining the VIPs in Lincoln will be Maj. Gen. Keely R. Barney, division engineer of the Missouri River Division, Omaha Army Engineers; Col. Harry G. Woodbury, Jr., new Omaha District Army Engineer; Col. Vernon Hastings, who has been in charge of the Offutt missile system and will remain at Mead to direct activities of Lincoln's missile system, and Lt. Col. Hal Schroder, based at Lincoln Air Force Base as Omaha Army Engineers' supervising officer on the current missile site construction.



Gen. Itschner . . . missile-looking

Col. Hastings To Direct 12 Lincoln Missile Bases

Omaha (AP)—Col. Vernon L. Hastings, who is in charge of preparing Omaha area Atlas launch bases, also will direct the activating of 12 inter-



continental ballistic missile sites surrounding the Lincoln Air Force Base. Maj. Gen. O. J. Ritland, commander of the Air Force ballistic missile division, has notified Hastings of the additional assignment, the colonel's office said Tuesday.

Col. Hastings has his office at the Mead Ordnance Plant where planning and administration of the Lincoln missile sites also is being handled.

Hastings will work directly under Maj. Gen. Thomas P. Gerrity, whose Air Force Ballistic Missile Center recently was given the job of expediting the Atlas base program.

Hastings' activities in regard to the Omaha area base work are expected to remain under the Air Force Ballistic Missile Division, which is part of the Air Research and Development Command.

Gerrity's organization is a

unit of the Air Materiel Command.

Hastings will command the Air Materiel Command and the Air Research and Development Command detachments in the Omaha and Lincoln areas. These will be grouped into the Offutt-Lincoln Site Activation Task Force.

Hastings, in charge of Omaha area missile work for the past year, is a native of Table Rock, Neb., and a former resident of Aurora and Lincoln.

"Star" 17 Aug 60

Nebraska City Missile Work Moves Forward

By Gene Budig

Nebraska City — Another phase of work at the Atlas missile site west of here got underway Wednesday.

Concrete now is being

Nebraska News

poured in the control center, the heart of the Atlas base.

Directing the pouring operations is Kenneth Lauritsen, resident engineer for the Corps of Engineers.

Earth moving operations near the silo are almost com-

plete with only 12 ft. of earth yet to be moved, one official said.

An estimated 3,300 cubic yards of earth has been removed from the silo and an estimated 46,000 cubic yards from the open cut.

Two mats of steel were placed on the bottom of the silo before the concrete pouring started.

The reinforcing steel bars

are two and one-quarter inches in diameter.

Four hundred tons of reinforcement steel will be used in the silo.

Walls of the silo will be 3-foot thick.

However, slabs in the control center will measure up to 4-foot in thickness.

The actual concrete pouring project will require more than 7,500 cubic yards.

"STAR" 17 Aug 60

Top Army Engineer Official To Inspect Missile Sites

The Army Engineer's top official from Washington, D.C., Lt. Gen. Emerson G. Itschner, is scheduled to arrive in Lincoln Thursday night.

Heading a party of Air Force and Army generals, Lt. Gen. Itschner is coming here to look over Lincoln intercontinental ballistic missile sites.

The visit is his first routine inspection of the area's completely underground missile system of 12 launching pads around Lincoln.

Lt. Gen. E. A. Itschner

After inspecting the Lin-

coln area missile sites, Lt. Gen. Itschner will go to Salina, Kansas, where another similar underground Atlas system of 12 launcher sites is being built.

According to an Omaha district Army Engineer's spokesman, the visiting party, along with Lt. Gen. Itschner, will include Maj. Gen. A. M. Minton, director of civil engineering for the Air Force in Washington, D.C., Brig. Gen. Alvin C. Welling, newly-designated commanding general of the Army Engineer's ballistic missile construction office in Los Angeles; and Brig. Gens. Christian F. Dreyer, Joseph E. Gill and William Leonhard, all with the USAF.

Joining the party in Lincoln will be Maj. Gen. Keith R. Barney, division engineer of the Missouri River Division, Omaha Army Engineers; Col. Harry G. Woodbury, Jr., new Omaha District Army engineer; Col. Vernon Hastings, who is in charge of the Offutt missile system and who will remain at Mead to direct activating of Lincoln's missile system, and Lt. Col. Hal Schroeder, based at Lincoln Air Force Base as Omaha Army Engineer's supervising officer of the current missile site construction.

OMAHA DISTRICT
18 August 1960
THE LINCOLN STAR
LINCOLN, NEBRASKA

Nebraska City Missile Work Moves Forward

By Gene Budig
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Nebraska News

poured in the control center, the heart of the Atlas base.

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The actual concrete pouring project will require more than 7,500 cubic yards.

OMAHA DISTRICT
19 August 1960
OMAHA WORLD-HERALD
OMAHA, NEBRASKA

Generals Inspect Missile Project

Two top officers having to do with the nation's missile base program inspected the Lincoln Atlas project Friday morning.

Lieut. Gen. Emerson C. Itschner, chief of Army Engineers, and Maj. Gen. A. M. Minton, director of civil engineering for the Air Force, toured the project during the forenoon. Then, in a change of plans, they shortened the visit and went on to Salina, Kans., to inspect a similar job there.

An Army Engineers spokesman called the visit a "routine inspection." General Itschner, he said, had not previously visited the Lincoln job, which with the Salina project is the nation's first unitary missile installation.

OMAHA DISTRICT
18 August 1960
LINCOLN EVENING JOURNAL
LINCOLN, NEBRASKA

Contract Awarded

Martin K. Eby Construction Co. of Wichita, Kan., low bidder for constructing the missile assembly and technical supply buildings at Lincoln Air Force Base, now has been awarded the contract.

The Omaha District Engineer said the bid was \$913,622 and the government cost estimate, \$1,075,000.

These buildings will be used for checking out missile weapons designated for the area's 12 Atlas missile launcher sites.

Atlas Rolls Into Lincoln For Display

"STAR" 1 Sep 60



THE MONSTER MISSILE

A section of an Atlas missile (left) as it entered Lincoln. The Atlas is also shown in a raised position. (Star Staff Photo.)

By Louise Holbert

An Atlas missile, standing 90 feet high, is a pretty impressive sight.

It still looks impressive, broken into sections, loaded on 5 trucks, the way a Strategic Air Command Atlas missile entered Lincoln Wednesday afternoon, complete with a police escort.

However, Lincolmites will get a chance to see the huge missile standing its full 90 feet, in the auto parking lot on the corner of 10th and N.

The missile will be raised to a horizontal position hydraulically Saturday, Sept. 2nd, in a public ceremony attended by local governmental and Air Force officials.

It will be on display until September 9th.

The missile is in Lincoln on tour with the U.S. Air Force Orientation Group, based at Wright Patterson Air Force Base in Toledo, Ohio.

The convoy, headed by Lt. Richard Conway, is touring midwestern Atlas missile sites and SAC support bases.

Coming to Lincoln from Forbes Air Force Base in Wichita, Kan., the convoy will visit Schilling A. F. B. in Salina, Kan., and Dyess Air Force Base in Abilene, Tex. before completing its tour.

Display

The mission of this orientation group is to display various Air Force aircraft throughout the country.

The Atlas is 16 feet in diameter, and an operational model weighs 195,000 pounds.

It travels at a speed of 16,000 nautical, and 17,250 statute mile per hour, and carries a nuclear warhead payload.

~~Star~~ 6 Sep 60
Engineers End

Work On Omaha Area's Missiles

Omaha # — Army Engineers have finished their \$14,276,300 worth of work on the Omaha area Atlas missile sites.

The Air Force and its contractors still must install electronic and other gear before the project—3 launchers each at Arlington and Mead, Neb., and Missouri Valley, Iowa—will be operational.

Except for signing acceptance documents, the engineer's portion of the work was wrapped up with a joint Engineers-Air Force inspection of a missile propellant-loading system at Missouri Valley.

The 16-month job was beset with difficulties: a severe winter, labor trouble, manufacturing delays, transportation difficulties and change orders that results because the bases were being built for a missile that itself was still in the development stage.

Lincolnite 'Good' Following Missile Site Accident

Crete—Hospital authorities here late Tuesday listed as "good" the condition of Howard Neiswanger, about 40, of 5165 Holdrege, Lincoln.

A worker at the missile site under construction 6 miles west of Wilber, Neiswanger was injured earlier Tuesday when struck by a piece of pipe while at the bottom of the 175-foot hole, according to the Army Engineers.

Neiswanger reportedly suffered a broken collar bone, cuts on the forehead and a possible neck injury.

He was wearing a welding mask and a so-called "hard hat" at the time of the accident. *Star* 7 Sep 60

"STAR" #8 Sep 60 In Grand Style

Blair, Neb.

Recent headlines say that "Omaha Site Atlas Work is Finished." Many of us poor little taxpayers will draw a sigh of relief at this pronouncement. Many business people in the area will not be too unhappy, either, because it was next to impossible to compete in the labor pool with the lush wages paid the workers on these projects.

Here we had another of our now famous "cost plus fixed fee" extravaganzas. The Army Engineers do everything on a grand basis and with lots of "boondoggle." Money has never meant anything to them, or to the Air Force, either, for that matter.

There was \$14,276,300 spent on this one Atlas venture. Everyone connected with it was paid fabulously and without justice or reason. These, we are told, are peace times. Why should there still be negotiated government contracts which still as during war encourage outrageous waste of money and material while guaranteeing profit? All this, while the farmer still gets criticism for what little he receives for producing the vital staff of life.

DEWEY NEMETZ

York Missile Work Moves Ahead

Round-The-Clock Schedule Keeps 110 Employees Busy

Lincoln Star Special

York— Down goes the "silo" at the Atlas Intercontinental ballistic missile base, Site 7, located 5 miles west of York.

Sixty-five feet in diameter, the "silo" which will eventually reach a depth of 175 feet below the earth's surface, will house the Atlas missile in a concrete structure 50 feet in diameter.

At site 7, the construction of the silo is past the underground water level which was reached at approximately 85 feet depth.

Pilings were driven past the water level to prevent water from filling the excavation which began after pilings were in place.

At least 12 pumps work continuously to prevent as much seepage of water as possible in the silo hole. Smaller pumps take out additional water seeping through the pilings.

After digging past the water level and barring any unforeseen complications, the remaining 75 feet of excavation should be easier.

As the huge cranes bite into the earth and bucket it out from the interior of the silo, the sides of the massive hole are supported by cor-

rugated steel sheets held in place with curved "I" beams. To further guard against any possible cave-ins, cement is forced through small holes in the steel sheets, filling any voids occurring behind these sheets of corrugated steel.

50-Foot Floor

Forms will be placed on the silo floor and cement will be poured to form a round hole 50 feet in diameter which will provide housing for the Atlas missile.

Rain or wet weather doesn't stop work at Site 7. Workmen are equipped with rain-protective gear.

Besides the reinforced concrete silo, there will be a concrete underground launch control center, the usual utility system, power and water lines and storage space for fuel and other facilities. All installations at Site 7 will be surrounded by fencing—nothing will be visible from Federal Highway 2 and 34 which parallels the site one-quarter mile at the south, nor will any part of the installation be above ground.

All water pumped from the excavated silo is being released on farm land adjoining the installation and is allowed to flow its natural course.

Currently there are 110 men on the job, working round-the-clock, 24 hours in 3 separate shifts.

Site 7 is one of 9 Atlas missile bases scheduled for completion May, 1961, according to contracts let to a Sioux City, Ia., firm Western Contracting Corporation, which was awarded contracts for the 9 bases at a total cost of \$17,400,000.



Site 7, IBM base located near York.



Contractor in helicopter (circled) . . . inspects a Lincoln Atlas site near Eagle.

Atlas Site Builders 'Keep Up' With Helicopter Hops to Dozen Locations

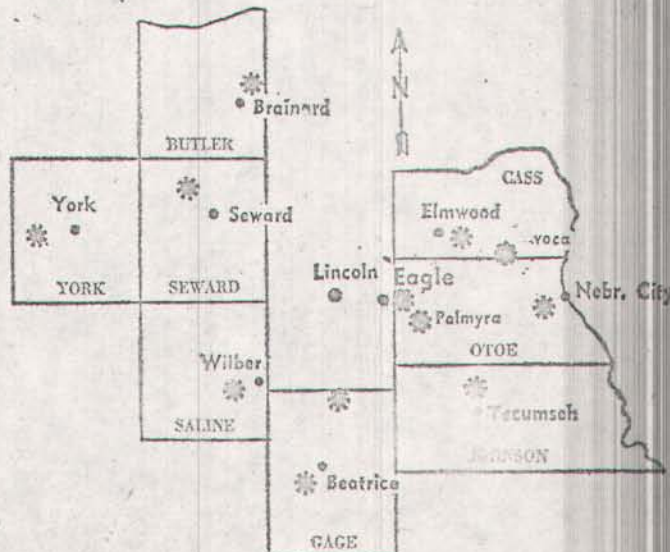
Western Contracting Corp. officials responsible for constructing the Lincoln underground Atlas missile system finding it pays to be up and 175 feet down in the earth are down—in the air.

They do this by helicopter.

This Sioux City construction company, nationally known for its building of big bridges, big dams and big roads, never needed a whirlybird in any of these jobs.

"If we used anything, it was a regular aircraft to travel long distances from one job to another," said Project Manager Mason Travis.

The geographical layout of Western's first missile undertaking, however, differs. It is



The 12 sites around Lincoln.

still one job but in 12 pieces (launcher sites) that are widely separated, yet in one general area ringing Lincoln.

Covering them by car involves a circuit of more than 500 road miles.

Using a helicopter makes it possible to cover and do about 3 times as much supervision and trouble-shooting as would be possible if officials kept on the ground.

The first craft acquired soon after Western began the \$27 million job increased to two a week ago.

Now Travis and his No. 1 assistant, Malcolm G. Schaller, can go their different ways via what both say are time-savers for missile-builders.

Work on all 12 launcher sites now is on schedule, looking toward meeting the Army Engineers' deadline of July, 1961, Travis said.

Excavating Is Past 85 Feet

York — Digging of the 50-foot wide hole here to house an Atlas missile has gone beyond 85 feet, with 175 feet the goal.

The water level was reached at 85 feet and 12 pumps are at work to remove water. Piling was also driven in place to help seal off water from the excavation.

Working 3 shifts a day, 110 men are on the job here. Completion is scheduled for May of 1961.

The York facility is known as Site 7.

MISSILE-SITE LAG HAS MANY CAUSES

Bad Weather and Changes
In Orders Listed Among
Reasons for Delays

By PETER BRAESTRUP

Special to The New York Times

OMAHA, Sept. 18 — Three Atlas missile sites under construction near here constitute a "horrible example" of the problems dogging the nation's high-priority missile base program.

Without their complex launching-guidance-fueling bases, the intercontinental missiles constituting the United States' first-line deterrent are useless.

Dispersed on gently rolling cornfields north and west of Omaha, the three Atlas bases may be turned over to Strategic Air Command crews by March or April, 1961. Originally, over-optimistic schedules set the completion date for the end of this year.

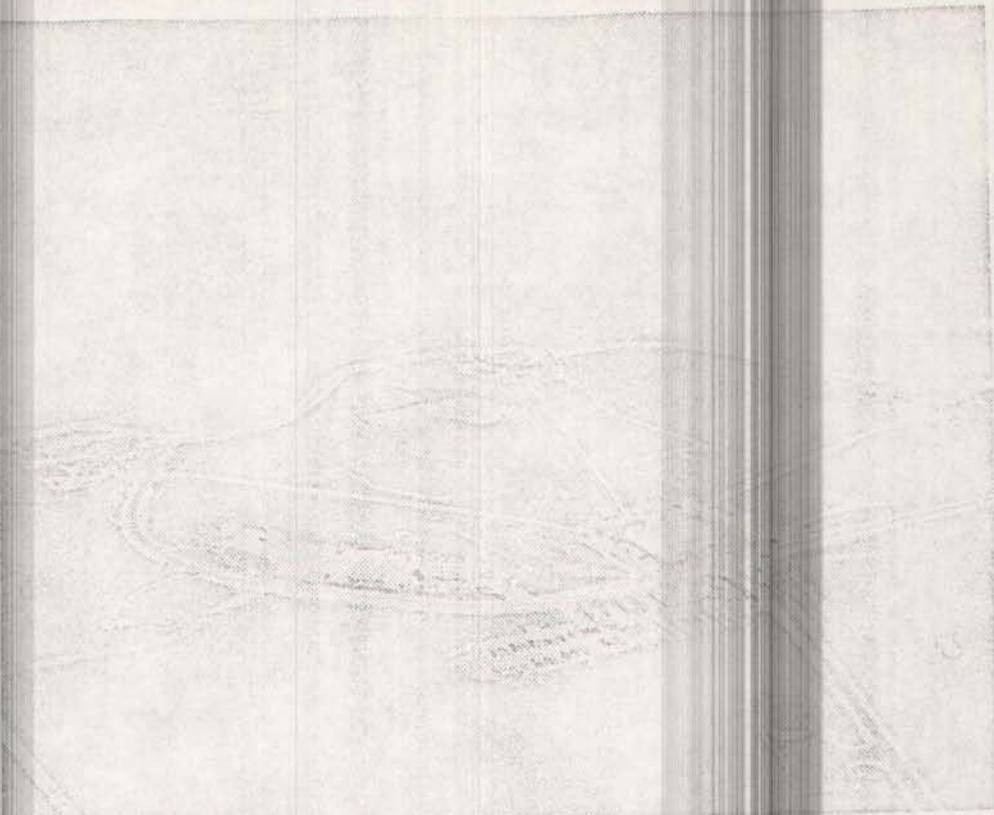
"Considering what we've been up against, I think we've done pretty well. Essentially, we started from scratch," said Col. Vernon L. Hastings, the Air Force site manager.

Most of the shortcoming that have plagued the three-year-old base-building program elsewhere, including public ignorance of the program's urgency and complexity, have cropped up out here.

The troubles have involved the contractors, their respective Air Force and Army Engineer supervisors, local labor unions and a New York state Congressman.

To start with, the \$130,000,000 base job presented abnormal coordinating problems.

An Army Engineer group, now headed by Col. John J. Haley, supervised one contractor and forty subcontractors during the "brick and mortar" phase. The Air Force's Ballistics Missiles Division, through Colonel Hastings, dealt with eight associate contractors and sixteen subcontractors in the equipment and installation phase. Six other Federal agencies were also involved. The two building phases overlapped, with as many as 2,000 workers involved at peak periods. An inspection tour of the three sites, which are located at Missouri Valley, Iowa and Mead and Arlington, Neb., meant a 151-mile automobile trip, unless a helicopter was available.



HIGH PRIORITY: This Atlas missile base outside Omaha, Neb., is expected to be operational in 1961. The three launching sites are at the end of the concrete paths. The building in center is the control and guidance center. The base building program has been plagued with troubles involving contractors and their military supervisors.

Change in Plans

Added to the zig-zags on the organization chart were abnormal technical requirements. For speed's sake, the design for the three bases and their nine Atlas launch pads was started in mid-1958. At Vandenberg Air Force Base in California, the first operational Atlas was not fired until last September, six months after the Omaha construction started. As a result, some changes had to be fed into the construction plans as work progressed.

"It was a pioneering job," said Colonel Hastings. "We had to learn a lot of things as we went along." Here, as elsewhere, missile systems experts were in short supply. Only Colonel Hastings and one other officer on his staff had had substantial Atlas experience.

Installation of much of the delicate propellant loading system, a massive jungle-gym of piping and valves, had to be done by plumbers and welders under conditions of almost surgical cleanliness.

"The task was grossly underestimated," said one site officer. "It took three months instead of thirty days."

Materials bottleneck occurred, further snarling schedules. Valves failed to meet specifications and had to be cut out and replaced. Parts of propellant loading systems were delivered four months after "need" dates. Fuel tanks were delivered from six weeks to fourteen weeks later.

"It was a...
exped...

New York Company Blamed

Part of the initial "fiasco" was attributed by local Air Force officers to poor or inadequate management by the Malan Construction Company, 2 Park Avenue, New York. This company, headed by H. J. Feldman and his four sons, was the prime brick and mortar contractor for Omaha bases. Its performance, which company spokesmen stoutly defend, has been the subject of much controversy.

The Malan company was the successful low bidder, by less than \$5,000, with a \$12,870,000 bid for the Omaha job on March 2, 1959. The bidding was handled, according to routine Army Engineer procedures, by the Omaha District Engineer. After studying Malan's qualifications, the District Engineer recommended that the bid be rejected because of Malan's lack of experience with such major projects. Malan was notified on March 23 that it had the right to appeal.

According to a company spokesman, the Feldmans felt that they had been treated unjustly. They conceded that they had never before tackled a job of this size, but they pointed to a "fine record" of work for the Atomic Energy Commission and other Federal agencies.

The Feldmans then asked a friend, Judge Carleton Roberts of Canandaigua, N. Y., to obtain the support of Representative John Taber of Auburn, ranking Republican member of the House Appropriations Committee, for their case.

Accompanied by Judge Roberts and Representative Taber, the Feldmans went to see the Army Engineers in Washington on March 25. They outlined a

York contracting firm of Grove, Sheperd, Wilson, & Krueger, Inc., would be brought in to make it a joint venture.

General Itchner immediately approved this new arrangement and recommended to the Omaha district officers that it be approved. Malan-Grove got the contract.

According to Representative Taber, a spokesman for the Engineers and the Malan company, no "political influence" was involved and the appeal was decided solely on its merits.

Mr. Taber's participation was not made public when the engineers announced the change. It was disclosed last month by Omaha television station KMTV and confirmed by the Congressman, after Army denials.

Malan spokesmen last week cited a severe winter, Nebraska's worst in fifty years and continual change orders as reasons for delay. Conceding the justice of these explanations, Air Force officials also cite poor contract supervision by Malan. "Bad weather and change orders account for only seven to nine weeks of the delay, which ranged from four to seven months," said Colonel Hastings. Officers say 90 per cent of the Omaha base job was subcontracted to some forty subcontractors. Malan said last week that together with Grove, it had supplied 45 per cent of the work and materials and that only twenty-five subcontractors were used.

Nevertheless, the Superior Electric Company, of Perth Amboy, N. J., was discharged by the Army Engineers as a major subcontractor for delays. A team of outside technical experts was brought in by the Engineers to make tests and recommendations. Four minor subcontractors are suing Malan and major subcontractors for allegedly not paying bills.

After earlier denials of allegations that some of the work done was unsatisfactory, the Engineers announced last June that Malan was correcting "deficiencies" in fuel tanks, slabs under launching buildings, and concrete pedestals under fuel lines. These deficiencies, Malan spokesmen contended, were "minor" when ranged against the size and difficulties of the job.

Granted a three-month extension and extra payments for overtime, Malan-Grove "substantially" completed its phase of the work on July 31.

After the Pentagon admitted delays in the missile base program on July 5, the Army ordered an investigation of the Omaha lags. The results have not been made public, but con-

tractor requirements have been tightened by the Army Engineers.

Resentful of criticism, a Malan spokesman last week indicated that the company would not again seek a missile base contract. "No thank you," he said, "we will not bid on this work, regardless of whether we can make a profit. We've been bludgeoned to death."

As Air Force and Army Engineers here point out, Malan-Grove was not the only contractor to experience delays. In the current installation and checkout of electrical equipment, some guidance equipment is on schedule but other key items are as much as ten weeks late.

Besides interservice difficulties and contractor problems, there remains the labor situation. With a minor construction boom in progress, Omaha is not a labor surplus area. Half the 2,500 or more workmen on the Atlas sites were hired locally. Local building trade craftsmen were unused to the extremely narrow tolerances and rigid cleanliness required in missile system construction.

The dispersed sites came under three different local union jurisdictions, Omaha, Council Bluffs and Lincoln. The work involved members of industrial unions. For instance, machinists worked side by side with local carpenters, plumbers, and steamfitters.

Jurisdictional disputes arose. One incident, which took place July 28, was cited by Army officials with wry amusement. A Teamster truckdriver drove up to a worksite with a load of nitrogen gas. He was starting to hook up the lines to the receiving tang when a member of the Steamfitters' union protested that that chore belonged to the Steamfitters. A brief walk-out ensued. A compromise was finally reached. The Teamsters, henceforth, would hook up one end of the nitrogen line and the Steamfitters would hook up the other.

Yet, Colonel Hastings pointed out, jurisdictional disputes did not account for most of the ninety-seven work stoppages on the Omaha sites. Most stemmed from workers' gripes about safety, unfair supervisors, and on-the-job squabbles. An eleven-day nationwide strike by the Machinists against Convair in June also held up work at Omaha. Local union leaders often could not, even when they tried, get men back to work while the dispute was settled.

In all, 6,400 man-days have been lost so far, without counting "slowdowns."

"Although they're only one

of the delay factors, labor stoppages tie up top management," said Colonel Hastings. "It means constant harassment. We have to take time out from advance problem-solving to take rescheduling action."

Richard W. Nisely, president of the Nebraska American Federation of Labor and Congress of Industrial Organizations, attributed most of the walkouts to invasions by outside technicians of the jurisdiction of the Carpenters, Plumbers, and other building tradesmen. "The building trades can't afford to let these technicians come in and take [the work] away from them," he said.

Conferences Urged

Mr. Nisely suggested that labor and management sit down in pre-job conferences to iron out such problems in advance: "This thing has to start at the top level. Then it can work down to the regional state and local level." But he was wary, he said, of any "no-strike" pledges.

Charles J. McNeil, president of the Omaha Building Trades Council, laid some walkouts to "fly-by-night subcontractors" who started writing "rubber checks." Another walkout occurred "when the Carpenters had an internal dispute and the other trades stayed away." Asked if he favored a no-strike pledge, Mr. McNeil said: "I wouldn't be opposed to any method to end work stoppages. If everyone lives up to the spirit of the contract, work stoppages will end."

But indications are that such stoppages will continue. South of Omaha, circling Lincoln, Nebraska's Capitol City, twelve Atlas "hardened" launching bases are being built.

Each involves digging a 160-foot-deep "silo" into the earth in a kind of mining operation. Each will shelter an Atlas and its supporting equipment. Since construction began in April, 125 members of Omaha Local 1140 of Hodcarriers and Laborers Union, together with other union men, have been working round-the-clock. But work stoppages, as well as bad weather, have already caused "slippages" of two weeks. Western Construction Company, of Sioux City, Iowa, the contractor, is doing the job for the Army Engineers. Said in Air Force major on the job: "We think there's a slowdown. You can't prove it but we can see it."

Earlier this month, Bud W. Fimmel, business agent of Local 1140, called all the men off the holes after Western laid off eleven workers without cause,

as Mr. Fimmel saw it. Two days later, the men were reinstated, and the laborers were back at work. Mr. Fimmel and Western finally signed a no-strike agreement.

Said Slim Ramold, a young shop steward on Atlas Site No. 1: "You have to have the union acting together. That's the way it's always been. This is just like any other job." What about strikes hampering the defense effort? "Well, everybody's out here to make money. Western's here to make money and I guess we're here to make money. Nobody wants to walk off the job, but that's the way it is."

None of the civilians involved seemed to comprehend the importance of the missile base program. Local newspapers pay little attention to the sites. An Air Force office commented: "They're no different from the general public. Nobody's telling them that we're in a tight race with the Soviet Union."

Mr. Fimmel of Local 1140 said in an interview that walkouts "have been the only way we've been able to deal with them." He cited inexperienced supervision and the strain of seven-day work weeks as causes of wildcat stoppages. "You can't drive people," he said. He had praise for Western's top management, but suggested that a full-time labor coordinator was needed.

"I've got holes down there," he said, "where there's never been any disputes." Unless changes were made, he said, "when they get with the crafts later on, they'll have nothing but trouble."

Missile Bases Work 'Most Urgent of Jobs'

Sites Are Viewed by Itschner

By Bess Jenkins

"Aside from a war, this is the most urgent of jobs for us."

"No, I'd say this job of building missile bases for the Air Force has the same urgency as wartime work."

These two comments — in one, two tempo — came from the Army Corps of Engineers' chief, the 3-star General E. C. Itschner of Washington, D. C. as he took rapid strides toward an awaiting Army helicopter.

It and another identically large chopper took the Pentagon-based general and his party of about a dozen general officers and assistants to 3 of Lincoln area's 12 Atlas missile launcher sites.

The group, representing the Army and the Air Force identified with the construction of the nation's missile bases, arrived in Lincoln from the east and west coasts Thursday night.

The visit was described as a routine one of regularly scheduled inspections which Gen. Itschner is making where his Engineers are constructing the missile bases.

Gen. Itschner, in the Army Corps since 1924, symbolizes the trend of the job of the Engineers down through the years.

He said:

"My first job in the Corps was to help build the Alaskan roads back in 1924. There have been many of those, many dams since. But this is the most urgent of all."



GENERAL IS BRIEFED—A glass-paned door permitted this photograph of the briefing given by Col. Harry Woodbury (standing), Omaha District Army Engineer, to Lt. Gen. E. C. Itschner (pencil in hand), No. 1 man in the Army Engineers Corps, and other top brass in the Air Force and Army, here Friday to tour some of the Lincoln area missile launcher sites. Maj. Gen. Keith B. Barney (left front row)

presently division engineer of the Missouri River Division, Omaha District Army Engineers, will go to Washington, D.C., next month for his new assignment as deputy Chief of Engineers. Col. Vernon Hastings, (hand to his face), is in charge of the Offutt missile system and has been assigned the same duty for the Lincoln project by the Air Force Ballistic Missile Division.

York, Wilbur and Cortland were the 3 sites seen by Gen. Itschner and his group, both from the helicopter and from the ground.

York, known as Site 7 to Western Contracting Corp., who have the Army Engineers' building contract; Wilbur, Site 6, and Cortland, Site 4, all are in various stages of the 175-foot mining operation.

These will form the concrete-lined silos or underground nests for the actual missiles.

Work on the all-concrete launch control center (connecting to the missile silos) which will be 45 feet underground is under way at the Wilbur and Cortland sites.

Completion of the 12-site system by the Army Engineers is scheduled for July, 1961. At that time the job of the electronic or "black box" equipment under Air Force Ballistic Missile Division supervision will begin.

Mason Travis, project manager for Western Contracting Corp., has said the overall schedule for the Atlas system work is to be completed by this date.

In the party with Gen. Itschner were Maj. Gen. A. M. Minton, director of civil engineering for the Air Force in Washington, D.C., and Brig. Gen. Alvin C. Welling, who is the commanding general for the Army Engineers' newly set up Ballistic Missile construction office in Los Angeles.

The group left Lincoln Air Force Base soon after noon Friday for Salina, Kan., where they were to inspect another Atlas underground missile system, began 45 days earlier than the Lincoln coun-

Three Atlas Bases Inspected

Army Engineers Chief Tours State Sites, Page 3



STAFF PHOTO BY WILLIS VAN SICKLE

GENERAL GOES UP—Three of Lincoln's 12 underground Atlas missile launcher sites were visited in a matter of hours by the Army Corps of Engineers' chief, Lt. Gen. E. C. Itschner, after he was photographed here climbing into an Army heli-

copter at Lincoln Air Force Base. The No. 1 Engineers man did the same later at another Atlas underground site near Salina, Kan. These visits will be "SOP" (standing operating of procedure), the 3-star general indicated.

Atlas Missile Sites Are Busy Places

Rapid Pace Being Set By Builders

By BILL HINEI

ATLAS MISSILE SITE — Under the wary eyes of the U.S. Army Corps of Engineers, construction is taking place at a rapid pace on 12 Atlas Missile sites in eastern Nebraska. The 12 sites, at Brainard, Seward, York, Wilbur, Eagle, Beatrice, Nebraska City, Tecumseh, Elmwood, Aveca, Palmyra and Cortland, are the \$23,000,000 'complex' which will protect this part of the state from attack and provide retaliatory power in case of attack.

The Atlas sites of this complex are not the first to be built in the nation, but are unique in that they are the first in the nation to be built underground. When construction is completed, the sites will be covered and landscaped and will hardly be visible. Contractor on the Beatrice site visited by the Daily News, is the Western Contracting Corp. of Sioux City, Ia.

NOT SECRET

The sites are not secret. You can visit them and take pictures. But you are asked not to take pictures showing the horizon or other identifying points so that anyone can get a "fix". However, since there are no restrictions in the area and nothing to keep anyone from walking right up and taking a picture, it is doubtful that the request would have any effect on keeping the site a secret. However, taxpayers may feel safer if there appears to be some restrictions.

Each of the site has only one missile. The unit will be housed in an upright position, in a 'hole' or tube, 175 feet deep, surrounded by three foot thick, reinforced concrete walls.

Nearby, at each site, is a launching control building from where the permanent crew can service and launch their weapon at a moment's notice. At each site, an adequate service road is built to the site and it is presumed that additional missiles can be brought into the pit on short notice.

In charge of the Beatrice, Site 5, is R. W. Deadman, project engineer, of the Corps of Engineers. On completion of construction, the sites are turned over to the U.S. Air Force Atlas Missile Department for operation and maintenance.

BEGUN YEAR AGO

The installation at Beatrice is three miles west of town on the Paul Claussen farm where surveys began more than a year ago.

So far, there have been no injuries in the construction work and one of the reasons is the extreme safety precautions in force at all times. All workers and even visitors, wear helmets when in the area. Supervisors are everywhere, watching every move made by the workmen, and stressing safety. Their theme is applicable, for after all, even the missiles themselves, are safety measures on a larger scale.

Lincoln Journal 27 Oct 60
**Progress on Strike
Settlement Claimed**

Brainard (UPI) — A spokesman for Western Contracting Co. of Sioux City says he believes some progress is being made in a strike at the Atlas missile base site near here.

He said he was hopeful that some settlement might be reached later in the day.

The Laborers Union Local 1140, which is picketing the site, remained off the job for the third consecutive day of work stoppage. The union has complained of lack of safety measures.

The Western firm wired Secretary of Defense Thomas Gates, asking him to take "necessary action" to end

the strike, which involves some 40 workers.

A concrete foreman, James Nutt, 50, was injured Tuesday when 3 men attacked him as he tried to take a picture of a picket sign. Butler County authorities said they were seeking the 3 men involved.

LINCOLN STAR 12 AUG 60
**1,104 MEN WORKING ON
LINCOLN ATLAS SYSTEM**

A total of 1,104 men are presently helping to build Lincoln's underground Atlas missile system.

But these aren't all the workers.

According to Mason Travis of Western Contracting Corp., builders of the missile system, a peak of about 1,500 workers is still to be reached by the end of construction expected to come next July.

Progress: Normal

Travis said construction work is progressing at a normal rate.

Shaft mining is being done

in 11 of the 12 locations.

Workers are now preparing to pour concrete for the shafts at the Tecumseh site.

Concrete is being poured for launch control centers at Eagle, Nebraska City, Tecumseh, Cortland, Beatrice and Wilber.

November through March of 1961 crews will be erecting structural steel, installing mechanical and electrical equipment and propellant loading systems.

Concurrent work operations are being carried on among all 12 missile sites, Travis said.

8^M Omaha World-Herald, Thursday, Oct. 27, 1960

Atlas Strike Protest Sent

Contractor Appeals to Defense Chief

The World-Herald's News Service.

Brainard, Neb.—A contractor Wednesday appealed to the Secretary of Defense to help end a strike delaying the construction of a launching site for an Atlas intercontinental ballistic missile.

Mason Travis, project manager for Western Contracting Company, Sioux City, Ia., said he has asked that the Department of Defense remove picket lines and place the administration of Laborers Union Local 1140 in charge of "responsible" labor representatives.

His telegram to Defense Secretary Gates followed an attack Tuesday on one of the company's concrete superintendents, James Nutt.

Three men assaulted Mr. Nutt as he attempted to photograph a Laborers Union Local 1140 picket sign. One of the assailants kicked and stamped on Mr. Nutt while he was down, Mr. Travis said.

Col. Minahan Reports Here

"JOURNAL" 5 Oct 60
Takes Charge of
Atlas Sites

Col. John E. Minahan has reported to Lincoln as the new Army Engineer in charge of construction of Lincoln's 12 Atlas missile launcher sites.

Col. H. G. Woodbury Jr., Omaha District Army Engineers chief, said Col. Minahan replaces Lt. Col. Hal W. Schroeder



who has been Lincoln area engineer for the Corps. Col. Schroeder will remain here as Col. Minahan's assistant.

The new Lincoln Atlas engineer, who will supervise the construction by Western Contracting Corp. of Sioux City, Ia., had his last assignment at Sandia Base, N.M. He was director, staff division, of the Field Command of Defense Atomic Support Agency.

A West Point graduate in 1940, he received a master's degree in civil engineering from the Massachusetts Institute of Technology in 1948.

During World War II Col. Minahan served with the Army Engineers in Iceland and Europe. He is a graduate of the U.S. Army Command and General Staff College, Ft. Leavenworth, Kan. Before his Sandia, N.M., assignment, he served from 1955 to 1958 in the office of the deputy chief of staff operations, headquarters, Department of the Army, Washington, D.C.

Col. Minahan

"STAR" 6 Oct 60 New Colonel Assigned For Atlas Building

Army Engineer Col. John E. Minahan has been assigned to supervise Lincoln area Atlas missile launcher construction.

Omaha District Engineer Col. H. G. Woodbury Jr. said Minahan will replace Lt. Col. Hal W. Schroeder as Lincoln area engineer for the Corps.

Lt. Col. Minahan Schroeder will stay on as assistant.

Col. Minahan comes from Sandia Base, N.M., where he was staff division director of the Field Command DASA (Defense Atomic Support Agency).

The colonel, his wife and 3 children will live in Lincoln.



Lt. Col. Minahan Schroeder will stay on as assistant.

OMAHA DISTRICT
18 September 1960
OMAHA WORLD-HERALD
OMAHA, NEBRASKA

Missile Site Men Needed

Corps Would Employ More Engineers

World-Herald Lincoln Bureau,
501 Federal Securities Building.

Additional engineers and inspectors are needed for missile base construction in the Lincoln area, the Corps of Army Engineers announced Saturday.

Lieut. Col. Hal Seder, area engineer in charge of construction, said the corps is prepared to hire qualified civilian personnel who apply at his office.

Most urgently needed, he said, are supervisory and inspection personnel with education and experience in mechanical, electrical and civil fields.

He listed these job classifications and salary ranges:

—Construction management engineers, \$7,560 to \$8,955 a year, experienced in management engineering duties incident to heavy construction activities.

—Construction engineers, \$6,435 to \$7,560 a year.

—Construction inspectors, \$5,355 to \$7,560 a year.

The area engineer's office is located in building No. 644 south of Lincoln Municipal Airport. Applications also may be made by mail to post-office box No. 1744, Lincoln.

OMAHA DISTRICT
SUNDAY JOURNAL AND STAR, LINCOLN, NEBRASKA
16 October 1960

Atlas Sites Turned Over to Engineers

Omaha—Responsibility for construction of 12 Atlas Intercontinental Ballistic Missile launchers in the Lincoln area has been turned over to the Army Corps of Engineers' ballistic missile construction office.

The sites are now 33% complete.

Col. H. G. Woodbury Jr., Omaha District engineer, handed the construction responsibility to Col. Woodrow Wilson, director of the Atlas "F" category of missile bases of which the Lincoln complex is a part.

The change is part of a new program to put missile base construction under one authority.

The launching sites, estimated to cost nearly \$24 million, will surround Lincoln on approximately a 50-mile radius. Each site will contain facilities and a launcher for one Atlas missile.

Construction at each site will involve 720,000 cubic yards of excavation, 80,000 cubic yards of concrete, 1,450 miles of reinforcing steel weighing 10,056 tons, 350,000 pounds of ducts, 15 miles of piping and 4,524 valves of varying sizes.



Wilson . . . new hat.

OMAHA DISTRICT
16 October 1960
COUNCIL BLUFFS NONPAREIL
COUNCIL BLUFFS, IOWA

As Part Of New Program . . .

Change Of Command For Atlas Missile Launchers

OMAHA — The 12 Atlas Intercontinental Ballistic Missile launchers in the Lincoln area — now 33 per cent complete — were turned over to the Corps of Engineers' Ballistic Missile Construction office of Los Angeles Saturday.

Col. H. G. Woodbury Jr., Omaha District Engineer, handed over the construction responsibility to Col. Woodrow Wilson, director of the Atlas F category of missile bases of which the Lincoln complex is a part.

This change of command is part of a new program established by the Chief of Engineers to put missile base construction under a single authority, patterned after the plan of the U. S. Air Force Ballistic Missile Center, also headquartered in Los Angeles. Brig. Gen. A. C. Welling commands the Corps' new construction headquarters.

One Atlas Each

The 12 launching sites, which will cost nearly \$24 million, surround Lincoln on approximately a 50-mile radius. Each site will contain facilities and a launcher for one Atlas missile.

Since these are "hardened" sites the missile launchers are being constructed in underground silos 57 feet in diameter and 174 feet deep. The control centers are 40 feet in diameter and 27 feet deep. All structures will be buried to the ground level when completed, leaving only access roads visible.

Col. Woodbury said the job is

now at peak construction activity with some 1,500 workers employed.

The 12 launcher-complex involves 720,000 cubic yards of excavation, 80,000 cubic yards of concrete, 1,450 miles of reinforcing steel weighing 10,056 tons, 350,000 pounds of ducts, 15 miles of piping and 4,524 valves of varying sizes.

Pioneers Construction

The Omaha District of the Army Engineers pioneered construction of operational missile bases in August, 1953, when it started building the first squadron of Atlas launchers at Francis W. Warren Air Force Base near Cheyenne, Wyo. This squadron is now fully operational.

The Omaha Atlas complex with three launchers each at Mead and Arlington, Neb., and Missouri Valley, Iowa, was turned over to the Air Force for installation of "black box" equipment last month.

The Lincoln complex is the third to be turned over to the new central construction agency under Gen. Welling. The first two were Titan ICBM launchers at Lowry AFB, Denver; and Ellsworth AFB Rapid City, S.D. A third squadron of Atlas launching facilities at Warren AFB, will remain under Omaha District supervision until it is finished.

14 Sunday World-Herald,
B Omaha, Oct. 16, 1960

Missile Base Job Shifted

Lincoln Project Now Under New Office

The Lincoln Atlas missile base job, now one-third complete, was turned over to Army Engineers' Ballistic Missile Construction Office of Inglewood, Cal., Saturday.

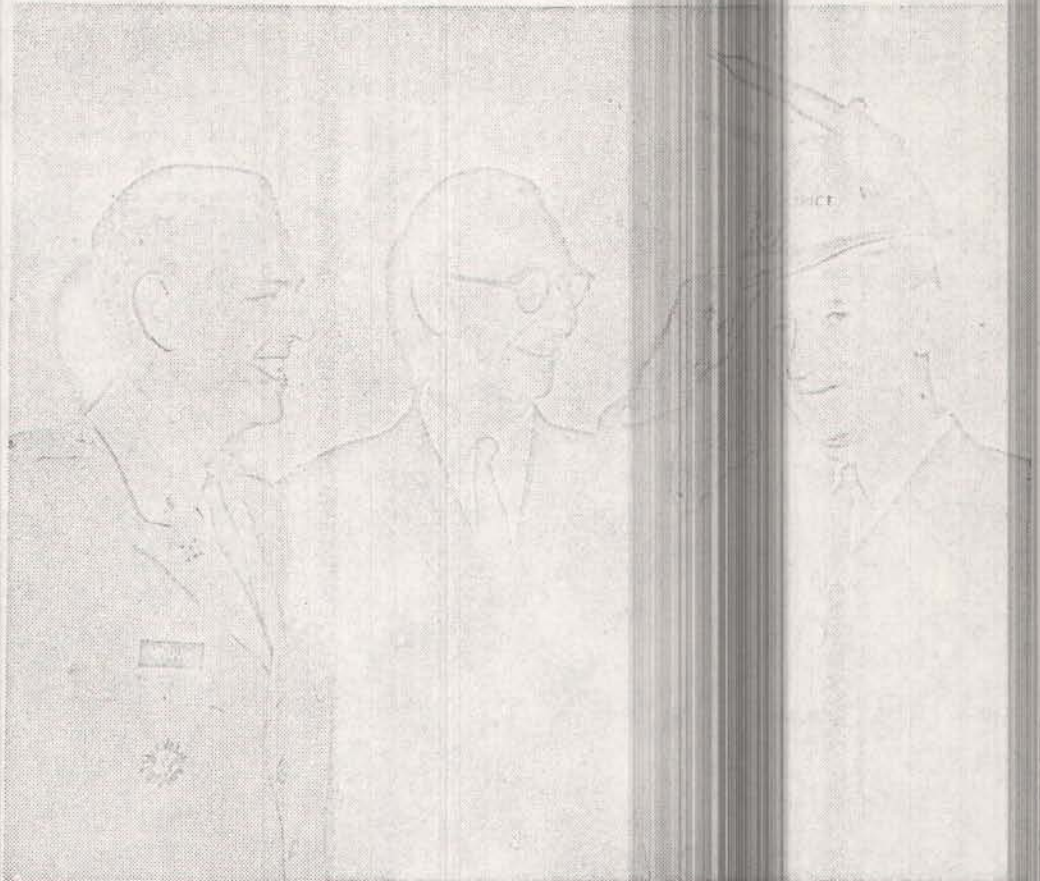
Col. Harry G. Woodbury, Jr., Omaha District engineer, handed the responsibility for carrying out the building of the 12 Atlas launcher complexes to Col. Woodrow Wilson, director in charge of building for Atlas F missiles.

The turnover was in connection with a new program established by the Chief of Army Engineers to put missile base construction under a single authority. It is patterned after the plan of the Air Force's Ballistics Missile Center, also headquartered at Inglewood. Brig. Gen. A. C. Welling is commander of the new construction set-up.

Cost 23.9 Million

The job, in which the missiles are spotted on underground unitary sites, surround Lincoln at approximately a 50-mile radius. Cost of the job is \$23,900,000.

The work involves 720 thousand cubic yards of excavation; 80 thousand cubic yards of concrete, requiring approximately 750 thousand square feet of forms, 10,056 tons or 1,450 miles of reinforcing steel, 350 thousand pounds of ducts, 15 miles of piping and 4,524 valves of varying sizes. Heart of each job is a missile "silo" 57 feet in diameter and 174 feet deep, or large enough to hold some office buildings.



Story at left.

Symbol of Atlas base construction responsibility is a hard hat surmounted by a missile . . . Here it is donned by Colonel Wilson as Colonel Woodbury (center) and Col. John Minahan, Lincoln area engineer, look on.

Colonel Woodbury said the job is now at peak construction activity with some 15 hundred workers employed, including carpenters, electricians, ironworkers, truckers, laborers, engineering and supervisory personnel.

Others Transferred

The Lincoln job is the third to be turned over by the Omaha District office, which pioneered construction of the nation's operational missile bases. The Titan installations at Denver, Colo., and Rapid City, S. D., were transferred last month.

The Squadron No. 3 job at Cheyenne, Wyo., now nearing completion, will be finished under Omaha District supervision. The district also built the first squadron at Cheyenne, which is now operational. The Omaha Atlas job was turned over to the Air Force last month.

"THE LINCOLN STAR" 20 Oct. 60

Cornhusker Winds Won't Slow Missile Launching

By Jim Woodson

When the Nebraska wind blows will the Atlas missile still go?

"We can fire in anything short of a tornado, without effect," stated Col. Vern Hastings, commander of the Offutt Lincoln Site Activation Task Force, speaking to a Wednesday night meeting of the student section of the American Society of Mechanical Engineers at the University of Nebraska.

The airman told the group of the history, the operation, and installation of the Atlas and the sites in the Lincoln-Omaha area now under construction.

A question-answer session followed his brief talk.

No Drop Here

Asked where in Nebraska the fuel tank and propulsion stages of the 3-stage Atlas would drop if fired from this area, Col. Hastings replied: "These stages will not drop in Nebraska but more than likely in the polar regions over which they cross. We have been able to predetermine where these stages will drop and seek to have this occur in sparsely populated regions."

One student engineer posed the question of how the construction crews on these Nebraska sites combat the high water table in such areas as Seward and York, to which

the colonel's answer came back:

"Actually, last month we had two of the deepest swimming pools in Nebraska."

He added: "The engineers and contractors did expect such difficulties, but it is far easier and more economical to pump water out while constructing the concrete silo than to build another Lincoln Air Force Base in the area needing support. You can pump a lot of water for that price!"

Hastings also told the group that the Nebraska squadron is expected to be operational within a period of approximately 30 months.

Concerning security, the Col. Hastings said there will be "a heavy wire fence surrounding the area, with electronically operated gates, as well as a periscope, but probably few security personnel visible to the public." This factor is "primarily up to SAC," he concluded.

Col. Hastings is presently stationed in Wahoo, in charge of the construction, installation, and checkout of the missile sites and missiles in the Lincoln-Omaha area.

18 The Lincoln Star
Thursday, October 20, 1960

SAC Brass Visits Here

Lincoln Air Force Base officials were host Wednesday to two of Strategic Air Command's top generals, General Thomas S. Power, SAC Commander-in-Chief and Lt. General John P. McConnell, Second Air Force Commander.

General Power spoke to a meeting of Lincoln Air Force Base officers in the base theater on Strategic Air Command's mission and its role as the free world's major deterrent force in the present world situation.

The two generals were given a briefing on the status of the Lincoln Air Force Base Atlas Missile Complex, and short tour of the base.

Prior to departure shortly before noon, General Power and General McConnell took time to congratulate the four distinguished crew chiefs of the Lincoln Air Force Base "Century Club"—crew chiefs whose B-47 medium jet bombers have made at least 100 consecutive on time take-offs without a deviation or cancellation.



GENERALS, CHIEFS CONFER

Members of the Lincoln Air Force Base's "Century Club" discussed the latest in air news here Wednesday. Chatting (left to right) are crew chiefs SSGT Robert E. Bergene, 120 Sorties; SSGT Kenneth W. McGee, 100 Sorties;

SSGT Steven L. Vensky, 106 Sorties; SSGT James R. Yandle, 103 Sorties; Gen. Thomas S. Power, Lt. Gen. John P. McConnell and Col. Thomas G. Corbin. (Photo Special to The Star)

"The Lincoln Star" 21 Oct 60

Sand, Water Woes Put 5 Missile Sites Behind

Sand and water have been the major enemies of the Lincoln area Atlas missile site workers who are still aiming at a completion date which would make the 12 sites "operational" by next summer.

Col. Frederick Marsh, missile weapons officer at the Lincoln Air Force Base, reviewed the Atlas work situation in detail Thursday, stating 7 of the 12 sites are being completed ahead of the schedule set up Aug. 1 by Western Contracting Corp.

Major troubles which developed at the York and Seward area sites brought work to a near-standstill for almost a month as water seepage into the excavation required pumping as much as 13,000 gallons daily from the workings.

A strata of clay may alleviate the water problem

somewhat, the officer said.

A third minor cause of slow-up, which has put the complex construction as a whole behind one-third on its schedule of the past two months, is labor trouble, including jurisdictional disputes between unions.

Col. Marsh forecast a speed-up in the coming months which could bring the construction program back on schedule, and explained that officials were considering either incentive pay for on-schedule work, or extension of the work schedules to allow for the past delays.

The missile expert, speaking before the Sertoma Club, cited the present lead which Russia holds in the missile race and reviewed the overall picture of nuclear-powered weapons and their importance in defense.

Man Is Hit at Missile Base Site Picket Objected to Photograph

The World-Herald's News Service.

Brainard, Neb.—A supervisory employe of a construction company was knocked down and beaten Tuesday by a picket at an Atlas intercontinental ballistic missile launching site construction project near here.

Hospitalized after what a spokesman for the Western Contracting Company of Sioux City, Ia., termed "an unprovoked, brutal attack" was Jim Nutt, about 50, concrete superintendent for Western.

'Kicked and Stamped'

Mason Travis, project manager for the construction firm on the 12 silo-type launching positions being constructed in Southeast Nebraska, said Mr. Nutt was attacked by three men as he attempted to photograph a picket sign.

"He was knocked down several times and kicked and stamped on by one of the men," Mr. Travis declared.

Efforts to identify the man are being made so that assault and battery charges can be filed against him, Mr. Travis said.

Construction Halted

The Brainard project is being picketed by Omaha Local 1140 of the Laborers Union, the construction company executive reported.

Pickets appeared at the site at 6 a. m. Tuesday carrying banners protesting "safety conditions" on the job. All construction was halted.

Mr. Travis said neither his company nor the Army Engineers which is supervising construction of the missile facilities, has received a complaint from the union about job hazards.

'Cause Uncertain'

"We're not certain of the actual reason for the stoppage. We never are with that local," said Mr. Travis. "We think it is over the firing of a fireman for incompetence."

Mr. Travis said there was no picketing or interruptions of activity at the 11 other missile sites.

His company, he said, is appealing to the national headquarters of the Laborers Union and other labor organizations to reach an early settlement of the issue at Brainard.

Gates Is Asked to End Brainard Missile Strike *Pickets on Site Access Roads; 40 Workers Fail to Show Up*

Western Contracting Corp. has called on Secretary of Defense Thomas Gates to "take necessary action to end a strike" at the Brainard missile site.

This is one of 12 sites in the Lincoln missile system now under construction and the only one hit by pickets of the Laborers Union 1140.

Western, according to Project Manager Mason Travis, also has its attorney attempting to seek an injunction to remove the pickets. They still were on the access roads to the Brainard site Wednesday, Travis said.

Travis, Lt. Col. Hal Schroeder, assistant to the Army Engineers area engineer in Lincoln, and news media were not able to reach business representatives of the laborers union by Wednesday noon.

No Workers

Travis' telegram for strike-breaking action to Defense Secretary Gates followed a day in which this action took place at the Brainard site:

—Pickets from the laborers union arrived on the site access roads at 6 a.m. Tuesday.

—None of the 40 workers currently working on the site showed up for work. This site is between construction phases. All of the concrete lining up to the top of the deep silo has been completed and the next work is back-filling and steel installation.

—Five truckloads of needed steel were not permitted to pass the pickets.

—Site Supt. Carl Estill asked and was removed from the Brainard silo launcher "in deadly fear for his safety and that of his family after threats. He fired a foreman last week for incompetence."

—James Nutt, one of the company's concrete superintendents, later attempted to take a picture of the signs carried by pickets which referred to unsafe working conditions."

Travis said Nutt then was attacked by 3 persons who had been sitting in a nearby car, and was knocked down, beaten and kicked. Travis said Nutt was treated at the Lincoln Clinic and now is at home recovering from "a bad beating."

—Pickets still were on the Brainard access road Wednesday and no work at the site was going on. A site clerk and several administration people were still on the spot.

Travis said his wire to Gates also asked that the department have the picket lines removed and that administration of Laborers Union 1140 be placed in charge of responsible labor representatives.

'No Reports'

Neither Travis nor Col. Schroeder had received any reports of unsafe conditions or any complaint from the union, both said.

Col. Schroeder said the Army Engineers' only concern in this strike is to try to get the two parties together to settle any differences.

"We had a representative at a trade union council meeting the other day and nothing

was said about lack of safety," Col. Schroeder said.

His telephone attempts to reach labor representatives finally resulted in sending a telegram to the offices in Lincoln, he continued.

Checked

The Army Engineer assistant also said the Corps' inspectors several days ago checked out the Brainard site for safety.

"We would like to get to the bottom of this allegation that the job is unsafe," Col. Schroeder said. Making sure the job is safe on all 12 sites is an Engineer Corps responsibility, he added.

Travis recalled that the only work stoppages through labor difficulties on the Lincoln sites has been occasioned by the Laborers Union since the project began.

Labor Dispute Has Violence At Brainard Missile Site

Brainard — A strike and picketing Tuesday at the Atlas missile site near here broke out in violence, injuring one official of the Western Contracting Corp. of Sioux City, Ia.

Hospitalized for treatment was James Nutt, about 50, concrete superintendent for the company.

Site Superintendent Carl Estill was escorted out of town by an armed guard of private detectives, and was flown "out of the state for his own protection," according to Jack Tarr, editor of the Butler County News-Press of David City.

It was believed that Estill was blamed for the firing of a foreman Monday. The superintendent was not expected to resume his duties at the Brainard site.

Mason Travis, project engineer for Western Contracting, said that pickets from Omaha Local 1140, laborers union, appeared at the site early Tuesday with banners protesting "safety conditions" and all work stopped.

Travis said Nutt was injured by a "goon squad" sent to the site, and not by the workers. Identity of the man who struck and knocked down the superintendent, and then reportedly kicked him, was not known, county enforcement officials said.

'Kept Trucks Out'

Butler County Sheriff Joe Meysenburg reported that two pickets who remained at the site kept 5 truckloads of steel from entering. He said that he expected the trouble to continue Wednesday.

Travis stated that neither Western Contracting nor the Army Engineers supervising the work had received any complaints on the working conditions at the Atlas site.

He added that the real reason for the trouble may be the firing of a union member for incompetence. No un-

ion official has contacted him about the work stoppage, he said.

The company, Travis said, has had numerous work stoppages by the local and is appealing to national headquarters of the union for a quick settlement of the disturbance.

The Brainard site is the nearest to completion of the 12 Atlas bases ringing the Lincoln Air Force Base. As of Friday, Army Engineers officials reported that the base was 42% completed, and that no major problems with sand or water had been experienced during the excavation period.

Action Sought To End Missile Site Strike

In an attempt to end the strike which continued Wednesday at the Brainard missile site, Western Contracting Corp. of Sioux City, Ia., has called on Secretary of Defense Thomas Gates to "take necessary action to end the strike."

According to Project Manager Mason Travis, Western Contracting is also attempting to seek an injunction to re-

move the pickets. They were still on the access road to the Brainard site late Wednesday, Travis said.

The Associated Press Wednesday night reported that the Pentagon said Gates had not yet received the complaint from the firm. No comment will be issued until Gates has received the complaint.

Brainard is one of the 12

sites in the Lincoln missile system now under construction and the only one hit by pickets of the Laborers Union 1140.

Couldn't Be Reached

Business representatives of the laborers union could not be reached by Travis or Lt. Col. Hal Schroeder, assistant to the area engineer of the Army Engineers in Lincoln, by late Wednesday.

According to Bob Dolen, site clerk at Brainard, work was completely halted by the strike and picketers allowed no materials including 5 truckloads of steel to be delivered.

Site Superintendent Carl Estill was removed from the Brainard silo launcher "in deadly fear for his safety and that of his family after threats."

James Nutt, a concrete superintendent for Western,

who was struck and beaten Tuesday while attempting to take a picture of the signs carried by pickets, was recovering at home Wednesday after treatment.

No Report Received

Neither Travis nor Col. Schroeder had received any reports of unsafe conditions which the picket signs indicated or any complaint from the unions prior to the picketing.

"We had a representative at a trade union council meeting about a week ago and nothing was said about lack of safety," Col. Schroeder said.

Travis said his wife to Gates requested that the department have the picket lines removed and that administration of Laborers Union 1140 be placed in charge of responsible labor representatives.



Picket At Missile Site

Shown above is a picketing laborer on the access road to the Brainard missile site. The photograph was taken from across the road after the picketer refused comment and objected to the camera. (Star Photo).

STAR 27 Oct 60
**Action Sought
To End Strike**

The Western Contracting Corp. of Sioux City, Ia., has called on Secretary of Defense Thomas Gates in an effort to end the strike at the Brainard missile site. For story and picture see page 48. *altman*

JOURNAL 28 Oct 60

Missile Site Work Resumed

Injunction Sends Pickets Away

Work has been resumed at the Brainard missile site after union pickets moved out under a temporary injunction served by the District Court for Butler County.

This injunction restrains Omaha Local 1140, Laborers Union, from striking or picketing at any of the 12 Atlas missile sites in southeast Nebraska.

Mason Travis, project manager for the Western Construction Corp., building the missile base, said there will be a hearing Tuesday morning in David City District Court.

The union struck Tuesday against the company. Signs carried by pickets indicated the dispute was over "safety conditions," but Travis said he believed it probably was over the discharge of a foreman for incompetence.

STAR 20 Oct 60

Hearing Planned For Injunction

Brainard (AP) — Work was resumed Friday at the Brainard Atlas missile site after union pickets moved out under a temporary injunction issued by the district court for Butler County.

A hearing on a permanent injunction is scheduled Tuesday in the district court at David City.

Chamber To Hear General
—Brig. Gen. William R. Shuler, new division engineer for the U.S. Army Corps of Engineers, will meet with local business leaders to discuss the Salt-Wahoo project at a noon luncheon meeting of the Lincoln Chamber of Commerce Thursday at the University Club. 3 Nov 60

"STAR" 4 Nov 60

Mead Receives 3rd Missile

Mead — The last of 3 missile weapons due at the Mead Atlas missile site arrived Thursday from Offutt Air Force Base.

Work on the site is expected to be completed in about 3½ months, a base spokesman declared.

Meanwhile, one missile has been delivered to the Arlington missile site with another due next week and the 3rd by mid-November, it was reported.

STAR 8 Nov 60

Fall Into Silo Kills Missile Site Worker

Cortland (AP) — A worker who was setting reinforcing steel at an Atlas missile construction site here was killed.

An Army Engineers spokesman identified the victim as Delbert T. Ryan, 24, of St. Peter, Minn. He was employed by the O. E. Salyer Co., a subcontractor for Western Contracting Corp.

The spokesman said Ryan fell into the silo and was killed.

An official for the Army Engineers said a board of investigators has been named to investigate the accident.

"STAR" 2 Nov 60

County, Base To Cooperate On Roadwork

The Lancaster County Commissioners promised 100% cooperation Tuesday with the Lincoln Air Force Base in keeping county roads open this winter to navigational aid sites outside the base's perimeter.

County and air base officials met Tuesday at the base to discuss a snow removal program.

Base officials pointed out that although some of the navigation-aid sites are unmanned, roads must be kept clear to enable maintenance crews to reach the equipment immediately when the need arises.

Though the snowfall prediction this year is for as much snow as last year's record-breaker, Lt. Col. Joe V. Disana, LAFB vice-commander, said the excellent cooperation of the county board and air base engineers can reduce the problem to a minimum this coming winter.

Attending the meeting were Commissioners Rollin Bailey, Kenneth Bourne and Ralph Harlan; County Engineer Louis Weaver, Lt. Col. Nicholas P. Stoffel, deputy commander of civil engineering, and Col. Disana.

OMAHA DISTRICT
7 November 1960
LINCOLN EVENING JOURNAL
LINCOLN, NEBRASKA

Cable Link For ICBM Sites Set

*Groundbreaking
is Thursday*

The first stretch of hundreds of miles of underground communications cable linking all 12 Lincoln intercontinental ballistic missile sites to the underground Atlas system's headquarters at Lincoln Air Force Base will be started Thursday.

A spokesman from the Air Force Ballistic Missile Division office at Mead said construction responsibility for this step in the Lincoln missile system will be handled by Advanced Communications Engineering, a subsidiary of Cook Electric.

This linking of sites with the headquarters control room at LAFB differs from the system used for the Ofutt missile system.

The missiles division spokesman said that a microwave form of transmission is used at the Mead, Arlington and Missouri Valley, Ia., launcher pad sites.

Air Force representatives will be here Thursday with construction officials for the communications line groundbreaking ceremonies.

OMAHA DISTRICT
28 October 1960
SIOUX CITY JOURNAL
SIOUX CITY, IOWA

Atlas Missile Pickets Obey Withdraw Edict

LINCOLN (AP)—The pickets around the Atlas missile site near Brainard withdrew Thursday under an injunction issued by the district court for Butler county.

Mason Travis, project manager for Western Construction corporation of Sioux City, said the injunction restrains Omaha local 1140, laborers union, from striking or picketing at any of the 12 Atlas missile sites in southeast Nebraska.

The court, in David City, issued the injunction about noon, and the pickets withdrew shortly afterward.

Travis said work then started on the unloading of steel, which had been waiting in trucks parked along the highway since the strike started Tuesday. He expected all employes to return to their jobs Friday.

Further talks with the union will probably continue, Travis said. The strike started with the union's protest of "safety conditions." There was no picketing at any of the other sites.

Travis said earlier he believed the trouble may have been linked to the sacking of a fireman for incompetence. Wednesday he appealed by telegram to United States Secretary of Defense Thomas Gates for action to halt the strike.

New Law Nabs Truck "STAR" 8 Nov 60 13 Tons Overweight

Enforcement of Lincoln's newly-enacted truck ordinances got off to a flying start Monday.

Asst. Police Chief Orren Graves said a Fremont trucker was arrested for 7 separate overweight and overlength violations. Graves said state scales men, who are helping police in checking violations, said they have never come across a truck which was so much overloaded.

The truck, which was bound from Eagle to the Brainard missile site carrying a caterpillar tractor for use in construction work, was 13½ tons over the weight allowed by its license. It also was 31,780 pounds over-

weight on one axle.

The state scales men said if the trucker had been arrested on a state highway he would have been subject to fines of over \$2,100.

Graves himself was responsible for the arrest. The trucker came to Police Headquarters Monday morning and asked about bridge capacities in Lincoln.

Graves said he had officers take the trucker to the city scales at 19th and Q where the violations were discovered.

The trucker was released to appear in Municipal Court Thursday. His truck was unloaded and another truck with a larger carrying capacity will be sent for the caterpillar.

"STAR" 9 Nov 60

Workmen Plowing Under Cables For Atlas Sites

Workmen have begun "plowing under" a 275-mile communication cable covering 9 counties in southeastern Nebraska.

The cable will connect the 12 Atlas missile launching sites in the Lincoln complex.

Official groundbreaking ceremonies will be held Thursday afternoon. "somewhere east of Seward," according to John Hubbard of Advanced Communications Engineering of Washington, D.C.

Hubbard explained that the cable laying job began Monday, and "can't wait for ceremonies." The ceremonies will occur at whatever point the project has reached Thursday afternoon.

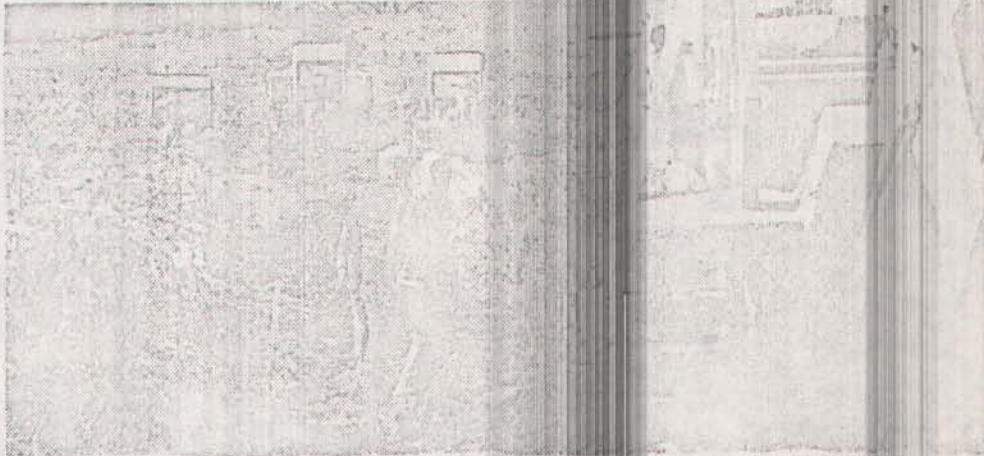
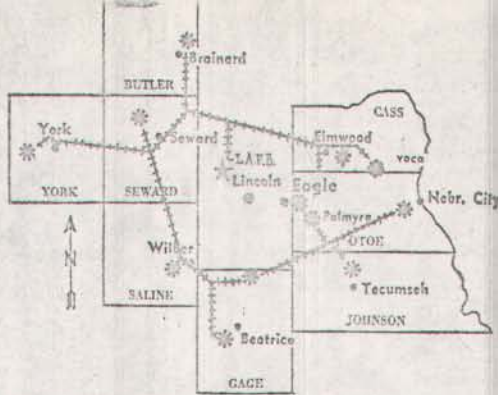
The cable is being "plowed under" by two large caterpillar tractors with a cable plow attached to the rear tractor. The cable is fed from large reels into the plow and under the ground to a depth of 3 to 4 feet. Ordinary communication cables are placed from 30 to 36 inches deep.

The cables range in size from 100 pair down to 15

pair. Any two pairs of cable have a capacity to provide up to 24 simultaneous communication channels.

Advanced Communications is the prime contractor, with the R. C. Hughes Construction Co. and Cable Construction Co. of Spokane and Tacoma, Wash., performing the actual cable placing.

Groundbreaking ceremonies will include representatives of the contractors, the Air Force and the National Electrical Contractors Association.



Inset map shows route of 275 miles of missile communications cable being plowed under by unusual equipment in picture.

First Cable Buried for Missile System's Safe Communication

By Bess Jenkins

You could mark your trail from Lincoln all the way to North Platte or Des Moines with the amount of cable it will take to give Lincoln missile system foolproof communication with its headquarters.

The first few hundred feet of some 275 miles of this moisture-resistant cable was buried 4 feet underground in a ceremony Thursday.

30 to 36"

On hand were representatives from the Air Force as well as from the Advanced Communications Engineering of Washington, D.C., a division of Cook Electric Co. of Chicago, the prime contractor; related construction companies and delegates from the National Electrical Contractors Assn.

John Hubbard, representative of Advanced Communications Engineering, said the cable will be down deeper

than "transcontinental cables, usually buried from 30 to 36 inches deep."

36 to 48"

Caterpillars are not an unusual sight in the 9 farmland counties where the 12 launch sites of Lincoln's intercontinental ballistic missile system are being constructed.

But this "plow under" of the cable requires two large caterpillar tractors to which a cable plow is attached.

As the machines move along, the cable is fed from large reels into the plow and under the ground to a 36 to 48 inch or more depth.

The communications cable, as shown in the accompanying map, practically encircles the area of the 12 sites and Lincoln Air Force Base where the Atlas missile squadron will have its support headquarters.

Spur Cables

From this ring will be buried spur cables out to each site.

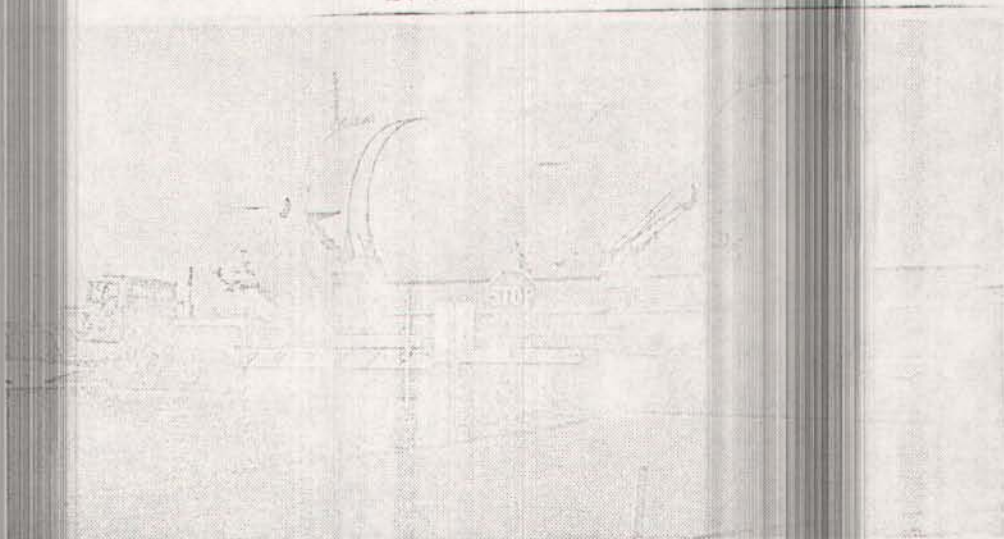
There are all size cables involved in this system, ranging from 100 pair down to 12 pair.

"Any two pairs of the cable has a capacity to provide up to 24 simultaneous channels

of communication channels, and equipment to develop these will be installed at 13 separate points of the cable," Hubbard said.

Actual cable placing will be performed by the R. Hughes Construction Co. and Cable Construction Co. of Spokane and Tacoma, Wash.

Advanced Communications Engineering has literally linked much of the world with cable, working in such distant places as Nepal, India, Japan and Greenland and throughout the U.S.



Man with a truckload of liquid oxygen . . . bottle weighs 50 tons.

Fuel Arrives For State's 1st Atlases

By Bob Minger

A huge vessel of liquid oxygen, designed to feed an Atlas missile, is on its way to a site near Tecumseh, the first of its type to go to the area.

The 50-ton bottle came into Cortland, the central gathering place, by rail and was placed on a flat-bed trailer to be trucked to the site at Tecumseh. The vessel was manufactured in Los Angeles.

At Cortland the Corps of Engineers took over for delivery to Tecumseh.

"It's sort of like building a boat in your basement," Lt. Col. Hal Schroeder of the Army Corps of Engineers said.

"You have to do things in a certain order. This is one of the first vessels to go into the 'Hole.'"

He explained that an Atlas site was built in a definite order, with first the hole being dug, next concrete being poured, next the steel framework being built in the hole, then vessels of different sorts put in, then electronic equipment of various types—then the missile itself is installed.

"This is just another step along the road to activating the site," Schroeder said.

He said there was a set of 10 vessels going into each of the 12 sites or "silos" near Tecumseh, and that this 50-ton bottle of liquid oxygen would complete one set.

"In two or 3 months we will have all of the vessels into all of the 12 sites," he said.

Col. Schroeder explained that the complex near Tecumseh was built by the Corps of Engineers, then the Air Force would take over and complete the rigging of the area.

"This is one of the early steps," Schroeder said, "but a most important one."

OMAHA DISTRICT
10 November 1960
OMAHA WORLD-HERALD
OMAHA, NEBRASKA

Atlas Link Job Begins

Huge Machines Used to Bury Cables

By Howard Silber

World-Herald Lincoln Bureau,
501 Federal Securities Building.

Digging began Thursday on the installations of 262 miles of buried cable to provide an underground communication link of Lincoln Air Force Base and 12 Southeast Nebraska Atlas intercontinental ballistic missile sites.

The digging, using some of the biggest plows seen in Nebraska, worked westward from a point about six miles directly north of Lincoln Air Force Base.

Full of Nitrogen

During the next six months, the trench will cross the northern part of Lancaster County, through Cass and Otoe Counties, Northern Johnson County, most of Gage, Saline and Seward Counties and into Butler and York Counties.

Minimum depth will be 36 inches. But in irrigated fields the cable will be 60 inches underground.

The cable, which has a diameter of about a 50-cent piece, is nitrogen filled to keep the copper conductors dry.

It is armored and protected by polyethelene.

Buried for Protection

The work is being done by the Advance Communication Engineering Division of the Cook Electric Company, Chicago, under an Air Force contract.

The cable is being buried to minimize the possibility of tapping and other interference and also to provide protection against blast damage in event of an enemy attack.

Every seven miles along the route there will be a manhole with reinforced concrete walls nearly two feet thick. These will contain step-up repeaters to maintain the strength of the communication signals.

Tops Flush

The tops of the manholes will be flush with the ground.

The missile bases involved will be supported by the Lincoln Air Force Base. The control posts for the 12 launchers will be at Lincoln.

The entire system will be tied in with the Strategic Air Command's worldwide alerting communication network.

The launching sites are being built west of Nebraska City, north of Tecumseh, in the northwest corner of Otoe County, in the northeast corner of Gage County, southwest of Beatrice, west of Wilber, west of Seward, west of York, southeast of David City, southwest and southeast of Elmwood and in Southeastern Cass County.

Cable-Laying Pauses For Brief Ceremony

By Gerry Deal

Machinery which is "plowing under" 275 miles of communication cable for the Lincoln Atlas missile complex paused briefly in its 5-miles-a-day pace for ground-breaking ceremonies Thursday.

The cable-laying got a jump on the ceremonies, beginning Monday to take advantage of favorable weather.

Representatives from the Air Force as well as from the Advanced Communications Engineering of Washington, D.C., a division of C&GS Electric Co. of Chicago, the prime contractors; related construction companies, and delegates from the National Electrical Contractors Assn. were on hand for the ground-breaking ceremony.

Deeper Than Usual

According to John Hubbard, representative of Advanced Communications En-

gineering, the cable will be buried about 48 inches deep, which is deeper than the "transcontinental cable" which is usually buried between 30 and 36 inches into the ground.

The 1½-inch diameter cable will link communications of the Lincoln Air Force Base with the 12 Atlas sites in the area.

Hubbard explained that a "man-hole" is located approximately every 7 miles of the cable system. These "man-holes", which have reinforced concrete walls two to 3 feet thick, will house electronic equipment for the communications system.

Unusual Operation

The "plow-under" involves quite a construction operation requiring 4 large caterpillar tractors, referred to as the "cable plow-under train."

The first two tractors move the earth to make way for the two tractors, one pulling the other, to which a cable plow is attached.

As the machines move along, the cable is fed from large reels into the plow and under the ground to a 36-48 inch depth.

Heavy Capacity

The cable contains from 15 to 160 wires, any pair of which has a capacity to provide up to 24 simultaneous communication channels, according to Hubbard.

Cable placing is being per-

formed by the R. C. Hughes Construction Co. of Spokane, Wash., and the Cable Construction Co. of Tacoma, Wash.

The project is expected to be completed by July 1, 1961.

The cable encircles the area of the 12 sites and the Lincoln Air Force Base where the Atlas missile squadron will have its support headquarters.



OVER HILL, OVER DALE

These cable-laying machines moved at a quick walking pace as they buried a moisture-resistant cable northwest of Malcolm as part of a communications system linking the Atlas missile sites surrounding Lincoln. They paused briefly Thursday for official groundbreaking ceremonies. The

first set of Caterpillar machines loosened the ground, while the second set fed the cable from a reel to the bottom of a knife-like plow and buried it up to 48 inches deep. A big disc harrow followed to level the earth. (Star Photo.)

Missile Fuel Arrives At Tecumseh's Base

By Dean Terrill

Southeast Nebraska Bureau
Tecumseh—A giant step toward arming Lincoln's 12-site Atlas missile complex was taken with the shipment of a 50-ton liquid oxygen vessel to the base here.

The 46-foot missile fuel drum, one of which will go to each site, made the highway trip from Cortland in a police-led 10 mph caravan. Another has already come by rail to the Cortland unloading dock, destined for Brainard, and the other 10 are expected in the next two or 3 months.

Several sets of wires were raised for the unit as it proceeded south on Highway 77, then east on Highway 136. The Beatrice business district was bypassed, although the vehicle did go through town.

Seven smaller vessels, ranging from 7 to 44 tons, have already been shipped to Tecumseh over the past two weeks, according to a spokesman for Western Contracting Co.

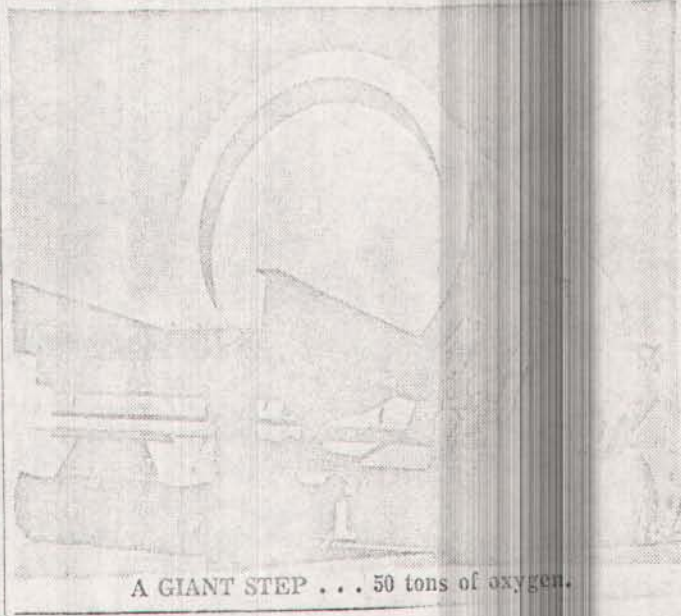
Lt. Col. Hal Schroeder of the Army Corps of Engineers explained that the various vessels are placed in each

silo as certain work stages are reached.

"This is just another step along the road to activating the site," he continued.

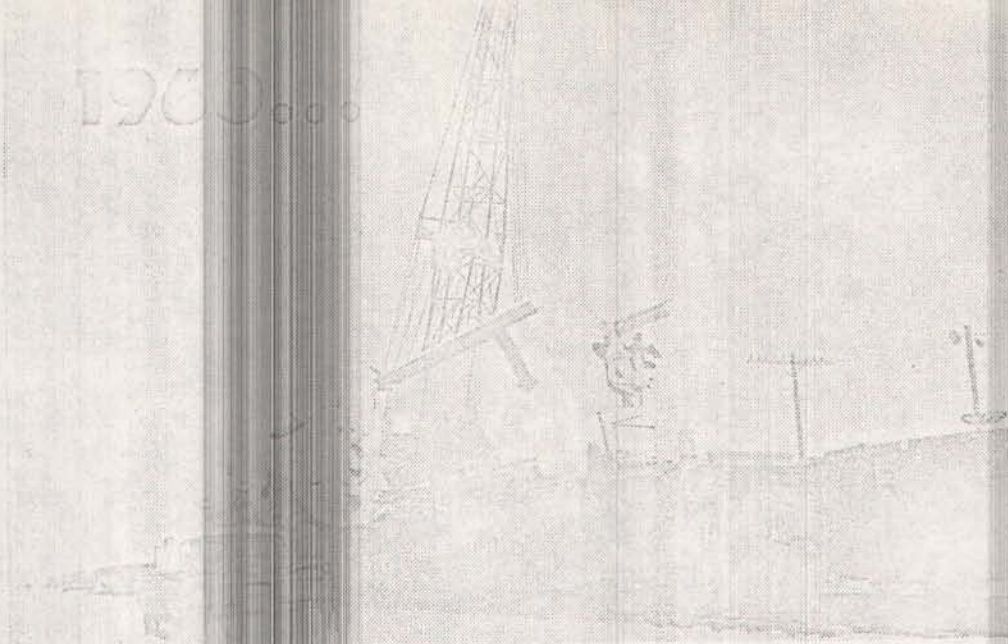
The trailer carrying the huge drum was built at the contracting firm's Cortland

pipe fabrication shop — welders and other employees worked around the clock for 3 days. Thirty-eight wheels were used on the trailer-tractor rig, which with its cargo was estimated to weigh some 150 tons.



A GIANT STEP . . . 50 tons of oxygen.

1960



Crane lifts tanks for use in missile base sites

Missiles, Not Gold, Be

Cortland — A modern day boom town has sprung up in southeast Nebraska.

Twenty miles south of Lincoln on Highway 77, the once quiet hamlet of Cortland has suddenly become a beehive of activity.

Carloads of rock, cement, steel brackets and tanks have been streaming in by rail daily to a small rail yard that had been used to unload an occasional car of grain or coal.

Strange Faces

Strange faces are appearing in the town almost daily, searching for places to live. Some tow trailer homes, parking them in what once was an apple orchard.

Basements that once stored canned fruit and vegetables now house workers that have come from as far as Canada and the northern part of Maine.

Cortland is feeling the shock that many towns experienced in the famous gold rush of 1849. Its population has increased more than 50% in the past few months. Only this time it isn't gold.

A single Strategic Air Command's Atlas intercontinental ballistic missile, sometimes called the "bird," will be housed on the Fred Hartwig farm, 3½ miles east of town.

Vernon "Pete" Peterson, Union Pacific Railway agent, said while he handled 5 cars of coal and lumber of 1959, in October of this year he handled 107 cars. All of the cars contained materials destined for the 12 Atlas missile sites that will be constructed at strategic locations in southeast Nebraska.

"I've never seen such huge equipment," Peterson said.

Heaviest piece handled in the assortment of gigantic nuts and bolts is the massive 50-ton liquid oxygen tank recently transported by truck to the Tecumseh missile site.

Outside the rustic 1884-built frame train depot building, a crew of 15 men, wearing strange-looking steel hats, keeps a constant flow of traffic heading out to the 12 missile sites.

A mammoth crane, with boom and cable towering 50 feet into the air, can easily pick up 60 tons of steel in one bite and gently set it down alongside the track for future delivery to designated areas.

To cope with the tremendous increase in rail traffic, the Western Contracting Corp. of Sioux City, Ia., major contractor for the Air Force on the missile sites, had Union Pacific build an 800-foot railroad spur in the north yard.

Bob Theriault, yard materials handler, said, "The

Lincoln Sunday Journal and Star 20 Nov. 1960

ASKA

- Lincoln Sunday Journal and Star
20 Nov. 1960

...and 1885



First cattle train arrived in Cortland in spring of 1885

hind This Boom Town

new spur has enabled the crew to handle the incoming and outgoing material without too much trouble."

He said more than 70 carloads of steel counter weights and brackets have arrived since Sept. 15. In addition, 230 carloads of cement and gravel for the Cortland site have arrived. About 50 more carloads of steel and an undetermined amount of cement and gravel are yet to arrive.

'Cordial Acceptance'

Car Bonebright said, "At first we were somewhat apprehensive of the missile and out-of-towners coming in, but we have accepted them in a cordial way and in turn they

have become part of us."

He continued, "This sudden expansion in the town has affected the school program. The school was at full capacity prior to their coming. Now approximately 35 to 40 additional youngsters have enrolled. That old brick school building is literally bulging at the seams."

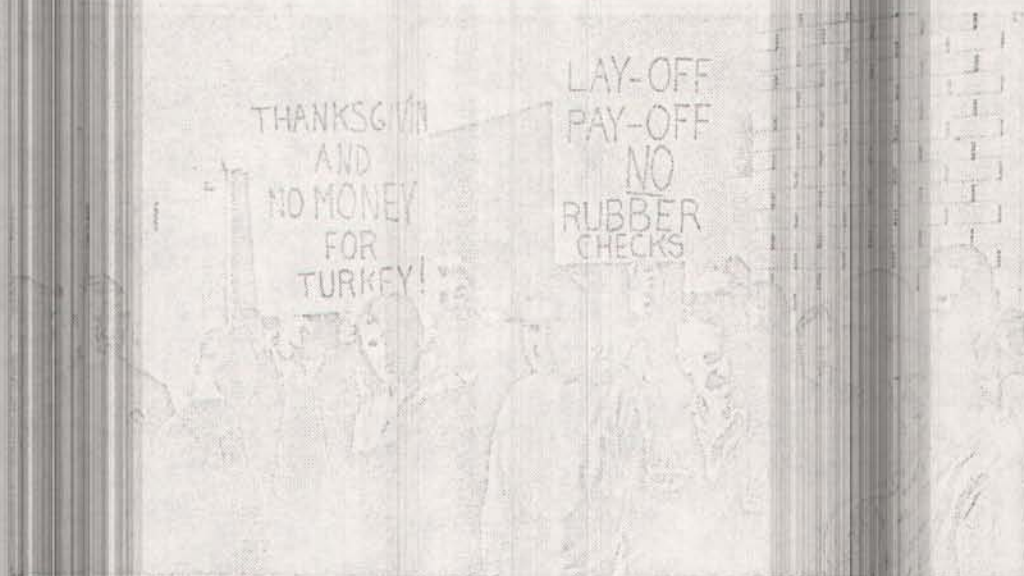
But like all boom towns, the mushroom effect lessens as the work dwindles. Within the next year, many phases of the missile sites will be completed. Some of the "hard hats" will be pulling out while other people wearing the colors of the United

States Air Force will be moving in.

There is no definite completion date, however by spring most of the workers will be technicians with jobs inside the immediate missile site area.

But like the gold rush days, evidence will remain for a long time that there was such activity. East of town, a vast hole 65 feet wide and 185 feet deep will house the Atlas missile.

Completely entombed in its specially designed hole, the "Mighty Atlas" will wait concealed beneath an oversized manhole cover made of steel re-enforced concrete.



Thursday's traditional meal is on minds of these missile workers awaiting their paychecks.

Missile Pay Snarl Apparently Ended

By Bess Jenkins

Another crisis in the construction of the Lincoln Atlas missile system, this time involving workers' paychecks, apparently was solved Tuesday afternoon.

The inability of a major sub-contractor, the Hansen-Kashner Co. of Fresno, Calif., to meet its payroll caused the latest difficulty.

Work at the 12 sites was not interrupted but silo concrete workers employed by the defaulting sub-contractor gathered at the Lincoln offices of Western Contracting Corp., the missile building firm, to "wait until we're paid."

Checks Ready

Mason Travis, Western's project manager, said Tuesday morning some \$37,000 in payroll checks were available to the waiting men shortly after noon Tuesday.

Some Hansen-Kashner Co. employees who had received checks last week said they found the checks were not honored at the bank.

Travis said he was not informed of the sub-contractor's financial difficulties until last Friday.

"We immediately communicated with Hansen's bonding company, who instructed us to take over the remaining 15% of the work," Travis said.

He said there is money now to cover the checks out. Waiting workers Tuesday morning complained they had been told "for 4 days their checks would be ready that day."

Bud Finnell, business representative in Lincoln for Laborers Local Union 1140, said "some affected employees were getting pretty warm about it."

He also criticized Western's reluctance to deal directly with local representatives of the labor union which "provides about 800 of the workers on the missile sites."

No Hansen-Kashner spokesman could be reached, but Travis and a local Army Engineer's spokesman said the sub-contracting firm evidently hit financial difficulties in meeting the payroll of a

7-day, 'round-the-clock program.

Both pointed out the overtime involved in such a schedule.

Disgruntled Workers Seek Advice

Bud Finnell (foreground), union business representative, listens to pay grievances voiced by workers at the 12 Atlas missile sites around Lincoln who have threatened to walk off the job Tuesday. (Star Photo.)

Atlas Workers Ponder Strike

PAY HASSLE ARISES

By Nancy Ray

Angry workers at the 12 Atlas missile sites being constructed around Lincoln threatened to walk out Tuesday because some paychecks were bouncing at local banks, and other workers had not received paychecks for up to 3 weeks, union officials charged.

Crux of the trouble, according to a Laborers Local 1140 spokesman, is the subcontracting firm — Hansen-Kashner of Fresno, Calif., which has reportedly "gone broke."

Paychecks of the firm were not honored by local banks starting last Friday, and the Fresno firm officially pulled out of the Lincoln Atlas con-

struction work at midnight Sunday, leaving 190 members of Local 1140, and other union workers, either without pay checks for back work or with checks not being honored.

One Lincoln bank was reported to be cashing the workers' checks again Monday afternoon.

Promises Pay

Western Contracting Corp., general contractor for the missile site work, has promised to straighten out the paycheck snarl, according to Bud Finnell, Lincoln Local 1140 business representative, and the firm has posted a sign at its Lincoln offices promising payment to the workers at 4 p.m. Tuesday.

"There are a lot of angry men at the sites," Finnell reported, "and they aren't going to stay on the job if this isn't straightened out."

He said all 12 sites would be affected in a walkout because the Fresno firm was doing the cement work on the underground silos at all 12 intercontinental ballistics missile bases.

700 Affected

Leonard Schaefer, business manager of Local 1140, said in Omaha Monday that about 600 to 700 men are involved in the cement work, all of whom have been affected by the Fresno firm's withdrawal.

He added that Western contracting intended to make the checks good, but that despite several such promises, this has not been done.

Mason Travis, Western's project manager for the Atlas construction, confirmed that the Hansen-Kashner firm had defaulted, and that the firm's San Francisco "bonding company immediately took over the financial arrangements."

"Money has been deposited in the First Continental National Bank in Lincoln to cover the workers' checks," Travis assured, adding that Western was also guaranteeing payment on the checks.

Travis said that payroll checks for the workers employed by the Fresno firm during the last workweek ending Sunday would be available to the workers Tuesday—3 days earlier than usual—"and I see no reason for a walkout."

Workers Transferred

Workers of the defaulted firm "needed to complete the work" were automatically transferred to the Western Contracting payroll Monday, Travis explained.

The work of the Hansen-Kashner firm was approximately 85% complete, Travis said, and their default "will not interfere with our work schedule."

He said the firm's failure "was due to the tremendous tempo of work on these projects which goes on 7 days a week. We don't have a 5-day week in this work," he added.

Wednesday, November 23, 1960

CORTLAND

SPACE AGE BOOMTOWN

By SSgt. Marvin L. Hatcher

A modern day boomtown has sprung up in southeast Nebraska!

Twenty miles south of Lincoln, on Highway 77, the once quiet, peaceful hamlet of Cortland has suddenly become a beehive of activity.

Strange faces are entering the town almost daily, searching for places to live; some towing long, sleek trailer homes—to be parked in a large backyard that once was an apple orchard, or in the new parking area created for this influx of newcomers.

Basements that stored canned fruit and vegetables, now house workers that have come as far off as Canada and the northern part of Maine.

Cortland has felt the shock that many towns experienced in

the famous gold rush of '49. It's population has increased over 50 per cent within the past few months. Only this time it isn't gold.

The "beast" is coming to Cortland. Strategic Air Command's Atlas intercontinental ballistic missile, sometimes called the "bird," will be housed on the Fred Hartwig farm, 3½ miles due east of the town.

The free world's most successful deterrent missile is capable of delivering a "Sunday punch" to any part of an aggressor nation within a 9,000 mile radius.

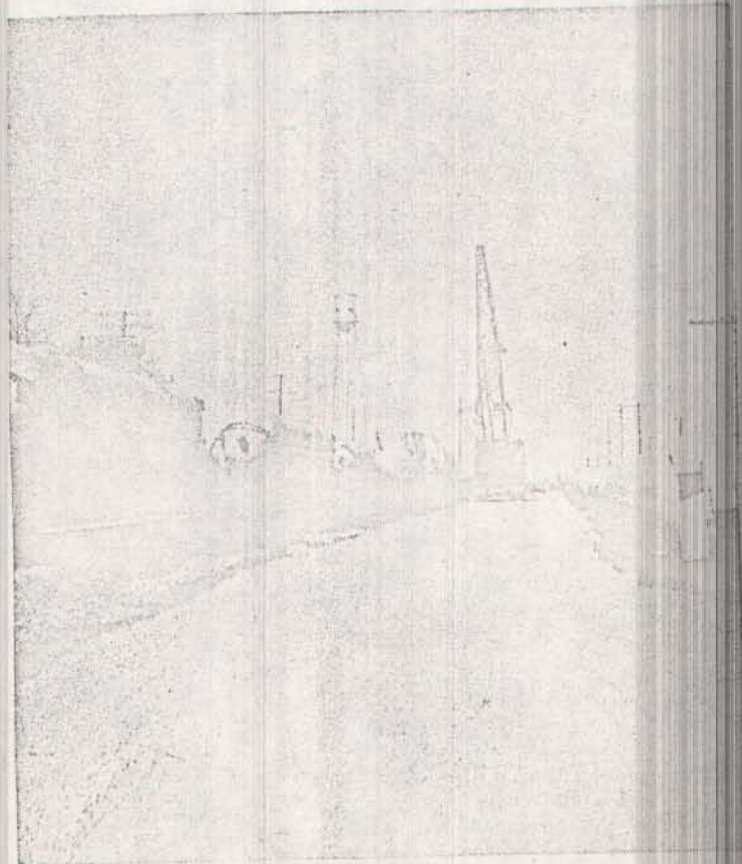
Carloads of rock, cement, steel bracket sand tanks have been streaming in by rail daily, to a small rail yard that has been used to an occasional grain car or load of coal.

Vernon "Pete" Peterson, Union

Pacific Railway Agent, in looking at records of November, 1959, disclosed that he handled five cars of coal and lumber that month. Flipping the pages to eleven months later, the ledger showed he handled 107 cars in October this year. All of these cars contained materials destined for the 12 Atlas Missile Sites that will be constructed at strategic locations in the southeast part of Nebraska.

In between telephone calls, and with the telegrapher's key constantly chattering in the background, Pete admitted he was working a lot harder. His comment—"I've never seen such huge equipment in all my life. But its worth it, I'm seeing things that I will never see again."

The heaviest piece of equip-
(Continued on Page 13.)



THE BOOM OF THE CRANE at the Cortland railroad seems to make the Cortland water tower out of proportion.

Boomtoun

(Continued from Page 12)

ment handled in this assortment of gigantic nuts and bolts is the massive 50-ton liquid oxygen tank that recently was transported by truck to the Redwisch Missile Site.

Inside the rustic old frame building that was built in 1884, a quaint coal burning, pot-bellied stove still heats the now deserted passenger waiting room that seats seven people. Passenger service into Cortland was discontinued in the 1930's.

In the adjoining room, telephone and telegraph equipment that was initially installed before the turn of the century is still being used.

The same desk which was used by the first agent 76 years ago, is now experiencing more paper traffic across its top in one month, than it did in any five-year period previously.

The 35-year-old Navy veteran, who spent five years on aircraft carriers and saw many parts of the world, is still fascinated by the fact that only a small, thin wooden door separate the 19th Century from the last moving 20th.

Beyond the small door that leads to the outside, tons upon tons of space age materials lie waiting for trucks that will carry it to the missile sites.

A crew of 15 men, wearing strange looking steel hats, with jobs ranging from pipe fitters to crane operators, keeps a constant flow of traffic heading out to the 12 different missile sites like the one east of town.

A mammoth crane, with boom and cable towering 50 feet into the air, can easily pick up 60 tons of steel in one bite and gently set it down alongside the track for future delivery to the designated areas.

To cope with the tremendous amount of rail traffic, the Western Contracting Corporation of Sioux City, Iowa who is the major contractor for the Air Force on the missile sites, had the Union Pacific Railroad build an 800 feet railroad spur in the north yard.

Bob Theriault, Materials Handler in the yard, stated, "The new spur has enabled the crew to handle the incoming and outgoing material without too much trouble." In checking his bills of lading, he revealed that over 70 carloads of steel counter weights and brackets have arrived since Sept. 15.

In addition to this, 230 car-



THE FIRST CATTLE TRAIN to arrive in Cortland was in the spring of 1885.

loads of cement and gravel for the Cortland Site has arrived. Theriault went on to say that approximately 50 more carloads of steel is scheduled in and at an undetermined amount of cement and gravel is yet to arrive.

Grocer Carl Bonebright, 48-year-old native son of Cortland, whose grandfather arrived one year after the town was founded, stated, "You know, we were first somewhat apprehensive of the missile and the out-of-towners coming in, but we have accepted them in a cordial way and in turn they have become part of us."

He went on to say, "This sudden expansion in the town has only affected the school program. The school was at full capacity prior to their coming and now approximately 35 or 40 additional youngsters have enrolled." He added, "That old brick school building is literally bulging at the seams."

Bonebright stated that at least 25 trailer homes were in the town and approximately 20 apartments and houses have been rented to construction workers and their families. One builder went as far as to construct a small apartment house for the increase of population.

John Wollenburg, cafe and filling station owner across the highway from the railhead, admitted his business has increased considerably since the arrival of

the missile construction workers. The small cafe which seats 20 people is full of these "hard hats" from 11:30 a. m. until 1 p. m. each day. Wollenburg stated, "I am fortunate to be in this location. These fellas can fill up their gas tanks outside and fill up on plenty of good solid food inside."

But like all boomtowns, the mushroom effect lessens as the work dwindles. And the village of Cortland is no different than any other place. Within the next year, many phases of the missile sites will be completed. Some of the "hard hats" will be pulling out while other people wearing the colors of the United States Air Force will be moving in.

There has been no definite completion date, however, by the time the snow ceases to fall in the springtime and green grass begins to sprout, most of the workers will be technicians working inside the immediate Missile Site area.

After all the construction has been completed, and the last worker has departed, Cortland residents will not easily forget the teeming activity that was part of their community for a short period of time.

And like the gold rush days, evidence will remain for a long time that there was such activity. For, out east of town, a vast hole 65 feet wide and 185 feet deep, that was dug with cranes instead of picks and shovels, will house the Atlas Missile. This Atlas will be fired only in case of war. And this will be done with only the direct order from the President of the United States.

Completely entombed in its specially designed hole, the

fore, unchanged, except for one thing. It will now harbor a secret—one that may some day deliver a deadly blow to the enemies of this country.

The school that was once bulging at the seams, will be using new history books that encompass the story of the Space Age Boomtown.

mighty Atlas will wait concealed beneath an oversized manhole cover made of steel re-inforced concrete.

But once again, Cortland will be a peaceful village, straddling the main highway leading south out of Lincoln. The same as be-



Worried Workers Get Their Pay

Eager employes of the defaulted cement firm subcontractor for Lincoln's Atlas missile sites crowd the entrance to the pay office at Western Contracting Corp.'s Lincoln offices to receive their checks. (Star Photo.)

Checks Avert Walkout At Atlas Missile Sites

By Nancy Ray

Swift action by Western Contracting Corp. Tuesday averted a threatened walkout of employes at the 12 Atlas missile sites ringing the Lincoln Air Force Base.

Paychecks of the defaulted subcontracting firm which

had "bounced" at local banks as early as last Friday were again being honored, and workers were paid off Tuesday for last week's work.

Some grumbling continued from former employes of the defaulted Hansen-Kashner firm who claimed that more than one week of back pay was due them but union officials said the grievances were being handled individually.

Workers showed up Tuesday at the Western offices with signs reading "No Checks, No Thanksgiving" but soon quit the demonstration in order to line up for paychecks.

The threat of a walkout arose Monday before announcement by Western Contracting, the general contractor for the sites, that the defaulted firm's payroll had been taken over and money deposited to meet the payroll.

Hansen-Kashner employed about 190 men on slip-form cement operations at the 12 sites. Many of the firms employes have been transferred to the Western payroll and will complete the work on the underground silos under Western direction.

Construction Peak At 12 Atlas Sites

LINCOLN, Neb. (AP) — Construction work has reached a peak at the 12 Atlas missile sites in the Lincoln area, and \$450,000 a week is being paid in wages.

The payroll figure was announced Tuesday by Mason Travis, project manager for the Western Contracting Corp. of Sioux City, Iowa, the prime contractor.

About 11,900 employees, including 1,600 employed directly by Western, are working on a round-the-clock, seven-day-a-week schedule, to draw the money. About 300 employees are hired and paid by sub-contractors working with Western, Travis said.

Although peak employment has been reached on construction, the program of electronic equipment installation by Convair-Astronautics and its subcontractors, which will follow, should provide a similar weekly payroll out of Lincoln, a Convair spokesman indicated.

OMAHA DISTRICT

LINCOLN EVENING JOURNAL AND NEBRASKA STATE JOURNAL

LINCOLN, NEBRASKA

29 November 1960

Missile Pay Is Record

\$450,000

Weekly in Lincoln Area

By Bess Jenkins

Lincoln's missile system construction, now at employment peak at all 12 sites, is costing its builder and sub-contracting firms a weekly \$450,000 in wages.

This figure, announced by Mason Travis, project manager for Western, represents what one banking official calls an "all-time record in weekly Lincoln payrolls."

About 1,900 employees, including 1,600 employed directly by Western, are working on a round-the-clock, 7-day schedule at the sites to draw this money. About 300 employees are hired and paid by sub-contractors working with Western, Travis said.

Peak Reached

Although peak employment has been reached and the work schedule will gradually decline as the July deadline for basic construction of the missile complex is reached, the program of electronic equipment installation by Convair-Astronautics and its subcontractors should provide a similar weekly payroll out of Lincoln.

A Convair spokesman from the company's Mead offices estimated there will be 2,600 employees and their families on hand when the electronic work on the Lincoln complex reaches its peak next September.

"Millions of dollars will be spent on wages," the spokesman said.

He estimated about 1,600 of the present workers finishing up Convair work at the Offutt missile sites would move to Lincoln from their present Omaha and Fremont homes.

Some To Commute?

"Some who have bought homes in Fremont and other nearby areas may prefer to remain there and commute to their jobs," he added.

But salaries of another 500 to 600 workers qualified for administrative support and technical background jobs to be recruited from towns near the Lincoln missile sites will add to the general economic status.

Traveling Recruiter

An employment office in Lincoln will be set up by Convair early in 1961 and a traveling recruiter will visit towns near the sites in March or April.

A Convair survey of its 1,055 employees in October at the Offutt sites (excluding subcontractor employment) showed 11% were living in Lincoln; 37%, Fremont; 42% in Omaha and West Omaha, and the remaining 10% at Wahoo and other small communities.

About 60% of the some 1,900 employees now on payrolls of Western Contracting and its subcontractors come either from Lincoln or from Omaha.

"Presumably, they live here or commute from Omaha," said a personnel spokesman. The remaining 40% come from other Nebraska towns or out of state.

He recalled Western's work on Pickstown, S.D., dam when a study disclosed employees came from 47 states.

He said overtime, double time and a 7-day a week schedule, involving Sunday work, in an effort to keep on the construction schedule account for the Lincoln record payroll.

OMAHA DISTRICT
OMAHA WORLD HERALD, OMAHA, NEBRASKA
30 November 1960

Missile Site Wages Peak

Lincoln Area Pay Roll \$450,000 Weekly

Lincoln (AP) — Construction work has reached a peak at the 12 Atlas missile sites in the Lincoln area, and 450 thousand dollars a week is being paid in wages.

The pay roll figure was announced Tuesday by Mason Travis, project manager for the Western Contracting Corporation of Sioux City, Ia., prime contractor.

About nineteen hundred employes, including sixteen hundred employed directly by Western, are working on a round-the-clock, seven-day-a-week schedule. About three hundred employes are hired and paid by sub-contractors working with Western, Mr. Travis said.

The program of electronic equipment installation by Convair Astronautics and its sub-contractors should provide a similar weekly pay roll, a Convair spokesman indicated.

An employment office in Lincoln will be set up by Convair early in 1961 and a traveling recruiter will visit towns near the sites in March or April.

Col. Marsh, Missile Weapons Officer, Speaks In Seward Next Tuesday Night

STEWART

7 Dec 60

The story of the Atlas missile site at Seward will be presented next Tuesday evening at a meeting sponsored by the Seward Chamber of Commerce in the Civic Center.

Col. Frederick Marsh, missile weapons officer at Lincoln air force base, will speak, and will illustrate his talk with colored movies, slides and charts.

Col. Marsh, with nearly 20 years in the military service, has had approximately 6000 hours flying time, from bases in both hemispheres.

He came to Lincoln about 18 months ago, from Redstone arsenal at Huntsville, Ala., headquarters for missile development under the famed Werner von Braun.

Col. Marsh's appearance at Seward was arranged by Tom Wake, of the Seward Chamber's program committee. Because of the wide interest in the missile project, and its effect upon the future of this area, the meeting will be opened for a wider audience.

Local citizens, adults and students, who would like to attend, may make reservations for the 6:30 dinner, or may come at 7 p.m. for the talk alone, without reservation. Those who wish to attend the dinner may purchase tickets from the Chamber Secretary, John Coyle.

The "Atomic Age" will more closely touch the lives of Seward area residents when the missile base located four miles west, two miles north, and another half mile west of Seward is completed and the deadly Atlas missile, armed with an atomic warhead, is installed.

Convair Astronautics is the builder of the missile and will begin installation of the launching equipment as soon as the concrete "silo" is completed.

The outer shell of the Atlas is 10 feet in diameter and flares to 16 feet at the base where the engine outlets are located. Loaded with fuel, the Atlas weighs 260,000 pounds from its tip down 82 feet to its "toes." Guidance equipment, batteries, and other such equipment are housed in two lateral "pods" mounted on opposite sides of the tank structure.

The missile is powered by liquid propellant rockets—two large boosters, one large sustainer, and two small vernier "trim" rockets all burn liquid oxygen and RP-1, a kerosene-like hydrocarbon. Takeoff thrust is approximately 300,000 pounds.



COL. FREDERICK MARSH

This power hefts the missile's destructive load more than 6,000 miles at 17,000 miles an hour, dropping it within a two-

mile circle 15 minutes after launching.

Convair and Air Force Ballistic Missile Division officials said that power and guidance improvements have steadily increased the range while shrinking the target error.

Atlas missiles at Seward will employ "inertial guidance", which cannot be "jammed" by radio signals.

Without fuel, the missile weighs 25,000 pounds—one tenth the loaded weight. The metal skin is so thin that it can't support its own weight. The Atlas is kept under constant internal pressure, making it at once an extremely light and extremely strong stainless steel "balloon."

Missile bases that are being built near Omaha are in "complexes" of three and they are above ground, while missiles in this area will be housed underground, and brought to the surface for firing.

Atlas missiles at Seward, Brainard, York, Wilber, Beatrice, Corland, Elmwood, Nebraska City and Tecumseh will be placed in 160-ft. deep concrete "silo" emplacements. Each structure will contain 4,000 yards of concrete and 90 tons of steel. Two hundred-ton concrete doors, strong enough to crack 18 inches of solid ice, open to allow an elevator to bring the Atlas to firing position.

Seventy-five separate cables, with a total of some 2,500 wires, connect each launch house building. Involved are approximately 25,000 cross connections.

All this is controlled by men underground, ready in their

Other construction in this area includes a liquid oxygen generating plant at the

Atlas Sites Discussed At Avoca

Avoca — Over half of Avoca turned out to hear a Strategic Air Command team discuss Atlas missile sites now under construction in eastern Nebraska.

The discussion, the first of a series for towns located near the sites, was led by Col. Thomas Corbin, Commander of the 818th Air



Corbin
Division at Lincoln Air Force Base.

Some of the questions asked of and answered by Corbin:

What about explosion in the Atlas silo?

"The danger is very small. If an explosion should occur, the destruction would be confined to the silo itself with no danger or damage to the surrounding areas."

Who has the authority to fire the Atlas?

"Only the President can order the launching of the missiles."

How about an accidental launching? Can one man in the silo set it off?

"No. It requires more than one man. Also, we have a sequence of safety measures to prevent accidental launchings."

Can more than one missile be fired from a silo?

"If the U.S. were attacked, there would be no need to use a silo for more than one launching. Also, after an Atlas is launched, sufficient damage is caused to the launching platform which prevents immediate reuse."

What about radiation effects from the Atlas?

"There are none. Radiation effects would come only from the explosion of an enemy missile in our territory."

The Atlas project's economic aspects were touched upon by Frederick J. Childress of Convair-Astronautics

He told the group that a gradual buildup of civilian personnel for the sites will reach a peak in 1961 of almost 2,600 families.

About 1,000 of these families will be located in or near Lincoln, he said, adding that it is Convair's intention to hire as many locally qualified persons as possible.

"We plan to hire between 500 and 600 persons in this area," he said.

Avoca Town Hall Jammed

"STAR" 16 Dec 60

For First Missile-Site Meeting

By Gene Budig

Avoca — Most of Avoca's 200 residents jammed the town hall Thursday night to hear about their future with the men in blue.

On the informative end of things was Col. Thomas G. Corbin, 818th Air Division Commander at the Lincoln Air Force Base.

Corbin, flanked by a team of ballistic missile experts, is touring the 12 Atlas missile base sites in the Lincoln area.

This was the first of the dozen stops.

'Needed Strength'

Corbin said that the two Avoca area missile sites — one 4 miles west and the other 4 miles east — give needed strength to America's defensive armor.

"Today," the Strategic Air Command division commander told the attentive group, "we face an enemy tremendously more dangerous to our way of life than we did in the 1940s — an enemy dedicated to our annihilation."

Sternly, the Lincoln officer reminded that for the first time in history, a potential

enemy has the capability to launch direct attack against the U.S. mainland.

Corbin said that such an offensive could be launched within minutes.

"To counter this threat, the Strategic Air Command has maintained for more than a decade, a combat-ready alert system which provides us with an instantly ready retaliatory force capable of de-

stroying an enemy's war-making capability, and making it totally unprofitable, if not suicidal, to attack us."

He said that Nebraska's ballistic missile sites will take their place beside the manned jet bombers in giving the country necessary security.

His comments drew frequent applause.

The economic aspect of the missile project was touched

on by Frederick J. Childress of Convair-Astronautics.

Childress said that at the peak of construction, the monthly payroll for the combined agencies will run about "one and three-quarters million dollars."

The Convair payroll will run about three-quarters of a million, he added.

Childress said there will be a gradual buildup of civilian personnel which will reach a peak in mid-1961 of almost 2,600 families.

"About 1,000 of these families will be re-located into the Lincoln and southern Nebraska area, and many will be looking for houses to rent in the towns close to the silos," he said.

The Convair official drew scattered cheers when he said that it is his concern's policy to hire locally as many qualified people as possible.

Present forecasts, he said,

call for the hiring of some 5 to 6 hundred area people between March and August of 1961.

To facilitate hiring, Convair-Astronautics will open an employment office sometime in March and will have a representative travel from town to town to interview applicants.

★ ★ ★

Corland Meeting Set Saturday

The next informational meeting on Atlas missiles and their operation is scheduled at Corland Saturday.

Other visits at the 12 Atlas missile base sites in the Lincoln area have not been officially scheduled.

The Atlas informational tour opened at Avoca Thursday night.

◆ Avoca

(Continued from Page 1.)

an enemy's war-making capability, and making it totally unprofitable, if not suicidal, to attack us."

He went on to point out that ballistic missile sites such as the Atlas sites being constructed in Nebraska, will take their place alongside the manned jet bombers in providing our country with the modern mixed force of missiles and bombers necessary to main-

tain our security.

Then in explaining the reason for the placing of Atlas Intercontinental Ballistic Missiles in Nebraska, Colonel Corbin stated:

"To be effective as a deterrent force, and effective it must be if we are to survive, our long-

range jet bombers and missiles must be dispersed over as vast an area as possible. This dispersal of retaliatory forces is necessary to make it as near to impossible as we can for an enemy to knock us out before we can strike back. "This is why," he said,

◆ Avoca

(Continued from Page 2.)

cities throughout Nebraska."

Following an informative color film which covered the development and construction phases of the giant Atlas, Frederick J. Childress, who represents Convair-Astronautics, spoke in considerable detail on the local site construction programs.

In discussing the Atlas missile "silo" type site being constructed near Avoca and at other locations in Nebraska, Childress gave out some statistics.

"The silo," he pointed out, "is a round hole measuring 52 feet across and 174 feet deep. During excavation, 71,000 cubic yards of earth are removed. The sides of the silo are made of reinforced concrete that runs from about two feet thick at the bottom to about nine feet thick at the top. Some 1,000 ready-mix truck loads of concrete are needed to pour the 6,000 cubic yards of concrete that go into the silo walls."

Childress went on to describe the engineering ingenuity involved in the silo construction. "The steel framework within the silo," he said, "is equal in height to an 18-story building, weighs 1,500 tons and hangs, shock mounted on giant steel springs as big around and as long as a telegraph pole."

According to Childress, the shock mounting allows a two-foot "rattle space" between the framework and the concrete sides of the silo to prevent damage from earth tremors.

He also called attention to the fact that the Atlas sites will have their own source of electrical power and will be able to generate enough power to supply an average city of 30,000 population.

Then touching on the control Childress pointed out that the electrical wiring necessary for launch control would stretch from Lincoln to Dallas, Tex.

In closing, the Convair representative turned to the subject of local civilian employment. "It has been estimated," Childress said, "that at the peak of the construction operation, the

Lincoln and southern Nebraska area, and many will be looking for houses to rent in the towns close to the silos."

Childress said that it is Convair policy to hire locally as many qualified people as possible and that present forecasts call for hiring some five to six hundred local people between March and August of 1961. To facilitate hiring, Convair-Astronautics will open an employment office sometime in March and will have a representative travel from town to town to interview applicants.

Childress' portion of the program was followed by Lt. Col. Frederick H. Marsh, Missile Maintenance Officer for Lincoln AFB, who told the people of Avoca what they can expect when the Atlas Missile site is finally an Air Force operated unit.

Colonel Marsh, well known as a speaker throughout the Lincoln area, emphasized that the Atlas Intercontinental Ballistic Missile will never be fired from these silo sites unless the United States is under attack, and then, only upon the President's order.

Then the missile officer went on to explain the extensive safety measures employed in operating the sites and assured his audience that the chance of an accidental nuclear explosion was "nil."

Elaborating on this point, the Strategic Air Command missile expert said, "We have never had an accidental explosion in the 15

years of handling weapons. The arming device is so designed that the warhead is not activated until the missile is well on its way to a target area thousands of miles away."

On the brighter side of the picture, Colonel Marsh said that on an average there would be 12 Air Force families in need of housing at each of the missile sites. "Each site," he said, "will be manned by 20 men, half officers and half airmen."

At the conclusion of Marsh's presentation which included color slides, Colonel Corbin invited the audience to take part in an open session in which he and the other two speakers would answer questions.

Strategic Air Command must spread out its forces over vast areas heretofore remote from military activities directly linked with our Nation's defense; why Atlas missile crews will soon be living in a number of towns and
(Continued on Page 7.)

monthly payroll for the combined agencies will run around one and three-quarter million dollars.

The Convair payroll will run about three-quarters of a million. There will be a gradual buildup of civilian personnel which will reach a peak in mid-1961 of almost 2600 families.

"About 1,000 of these families," he said, "will be re-located in the

Atlas Speaking Team

Briefs Avoca Citizens

Farm Community Learns Of New Missile Neighbor

Over half the population of Avoca, Nebr., was on hand last night at the Town Hall to take part in a highly informative public meeting at which they heard a three-man team of Strategic Air Command representatives discuss the new Atlas missile sites now under construction in this part of Nebraska.

Avoca is one of 12 communities within a 50-mile radius of Lincoln AFB where construction is already under way on the "silo" type Atlas missile sites.

The meeting last night was the first of a planned program initiated by Col. Thomas G. Corbin, Commander, 818th Air Divi-

sion, to speak at public meetings in each of the cities and towns which are located near the new Atlas sites.

"The need for these meetings," Colonel Corbin said, "is obvious. The advent of the missile era has created new weapons, and new concepts in carrying out our Nation's defense policies. The people of Nebraska are among the first in America to become closely associated with the Strategic Air Command's new missile weapon system. We feel that it is important that the public understands what is going on."

Following his introduction by Mayor Fred Marquardt, Colonel Corbin opened the program with a brief but detailed discussion of SAC's role in the new era of long-range ballistic missiles.

Touching on the threat that America faces today, he reminded the people of Avoca that the world tensions of 20 years ago were not unlike those of today. But he strongly emphasized that the measures necessary to meet that threat have changed drastically.

"Today," the Strategic Air Command Division Commander said, "we face an enemy tremendously more dangerous to our way of life than we did in the 1940's—an enemy dedicated to our annihilation."

The Colonel reminded his audience that now, for the first time in our history, a potential enemy has the capability to launch direct attack against the United States mainland, and that with long-range ballistic missiles he can launch that attack within minutes.

"To counter this threat," Colonel Corbin pointed out, "the Strategic Air Command has maintained for more than a decade, a combat-ready alert system which provides the United States with an instantly ready retaliatory force capable of destroying

(Continued on Page 2.)



CONVAIR ASTRONAUTICS REPRESENTATIVE Frederick J. Childress told the people of Avoca last night that the monthly payroll of the combined agencies working on the Atlas Missile sites in the area of the Lincoln complex will be about \$1¼ million at the peak of construction operation, expected in mid-1961. (Photo by Stidman)



Bearg has holiday coming up . . . no two-way radio in his plans.

First Holiday Since April

Missile Site Builders Get Two-Day Breather

By Bess Jenkins

Men building the ring of missile sites around Lincoln won't be working Christmas but will take their first holiday since the multi-million dollar job began last spring.

Still, if this Sunday was a work day as all days and Sundays have been since last April, it would be fairly easy to exchange a "Merry Christmas" with workers at all 12 sites and even the missile building company's main office at Lincoln in short time.

It could be done over a two-way radio system providing rapid communication between the complete field offices operated by Western Contracting Corp. at the 12 sites.

"Like the office here, the radio is going 24 hours a day, too," says Eagle site

Supt. Roy Bearg, who comes from Chicago and lives in Lincoln. The field offices are trailers.

"There's nothing like it when a problem comes up, like clearing a question on a blueprint, getting some advice or ordering some badly-needed equipment from the warehouse," the Chicago employe for Western continued.

The two-way radios may not have much use or much company the Monday after Christmas either.

"The men wanted to have that day off, too, so their first holiday will be a long one," explained project manager Mason Travis.

But Tuesday these builders of the deep sites from which nuclear weapons can be launched skyward thousands of miles will tackle the remaining 30% of the construction job still to be done.

Missile Age Splash 'Big' ... IN NEBRASKA

By Bill W. Dean
Associated Press Staff Writer

The missile age came to Nebraska in 1959, and in a big way.

Here are the impressive statistics:

—Nineteen launchers for Atlas Intercontinental Ballistic Missiles are abuilding. The first already are armed with their war birds and

built onto the Strategic Air Command's Offutt Air Force Base headquarters to house the new missile trajectory center. The center makes the complicated calculations necessary to put all SAC ballistic missiles on potential enemy targets. Cost of the new center without its equipment was \$1.5 million.

Nebraska News

will be operational shortly.

—At each of 3 sites a dozen launchers are being prepared for Nike-Hercules anti-aircraft missiles.

—The total cost of these missile installations in Nebraska will be in the neighborhood of \$200 million.

—An addition has been

—SAC headquarters also quarterbacked a test of a special train of the type which will be used as a roving launching platform for the Minuteman, an ICBM now in the development state.

Twelve of the Atlas missile launchers will ring the city of Lincoln. The missiles will be encased in underground silos to protect them from all out direct hits from enemy bombs or missiles.

Mighty Coaly

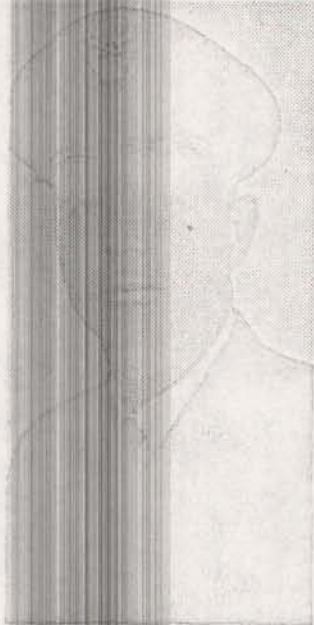
Without birds or vastly expensive electronic gear, and activation costs, the Lincoln complex will cost about \$45 million. It seems likely the complex will be operational next year.

Nine Atlas launchers are being built in the Omaha area, 6 of them in Nebraska. These are in clusters of 3 to a site unlike Lincoln's one-to-a-site launchers.

One cluster is at Mead, another near Arlington. The third is in Iowa, near Missouri Valley.

The Omaha complex missiles lie in "unhardened" launchers plus above the ground. The Lincoln sites, with their concrete silos sunk in the earth, are "hardened."

OMAHA DISTRICT
WORLD HERALD, OMAHA, NEBRASKA
14 January 1961



Missile Speaker

Col. Thomas G. Corbin of the Lincoln Air Force Base will head a three-man team which will give Atlas missile talks at Cortland, York and Beatrice this month. Colonel Corbin is commander of the 18th Air Division, which will include the 551st Missile Squadron with its 12 launching sites within a 50-mile radius of Lincoln.

Last This Week

The last of the launchers was armed with its missile this week. The complex is expected to be declared operational early in 1961.

The cost of the Mead and Arlington projects, before electronic gear, \$16.5 million. The electronic equipment, cost of activation and cost of the missiles will add another \$40 million to this figure.

A hardened Atlas site is also being built about 2 miles southwest of Kimball as part of a Cheyenne, Wyo., complex. The price tag, minus electronic equipment and activation costs: \$3.6 million.

McClellan Orders Full-Scale Probe Of Work Delays at Missile Bases

Washington (UPI) — Sen. John McClellan (D-Ark) Saturday ordered a full-scale staff investigation of delays caused by wildcat strikes and other work stoppages at Cape Canaveral, Fla., and other big missile bases.

McClellan, chairman of the Senate Permanent Investigations Subcommittee, said information from preliminary inquiries shows that millions of dollars have been lost with a "possible serious blow" to U.S. missile progress through work delays.

He said hearings will be held later after the subcommittee staff completes its preliminary work.

Teamster Hearings

Meantime, the investigating group opens public hearings Tuesday into charges of labor racket control of Teamster Unions in the New York area.

James Hoffa, stormy president of the big Teamsters Union, again will be in the spotlight as the major witness. The inquiry originally was scheduled for November but

was postponed.

McClellan said that Martin O'Donoghue, former chairman of the court-appointed Board of Monitors for the Teamsters, also will be among the witnesses.

Rackets Group

The Teamster hearings are a follow-up to investigations by the former Senate Labor Rackets committee which McClellan also headed and of

which Robert Kennedy, attorney general-designate in the new administration, was chief counsel.

President-elect John Kennedy was a rackets committee member.

McClellan said the subcommittee authorized the missile base investigation on the basis of information "thus far developed through preliminary inquiries."

Public Meetings *Star 1/4/61* Are Scheduled On Atlas Bases

A team of Atlas Missile experts headed by Col. Thomas G. Corbin, commander of the 818th Air Division at Lincoln Air Force Base will speak at 3 public meetings this month in the southeast Nebraska area on the subject of the new Atlas Missile sites.

Along with Col. Corbin on the speaker's team are Col. Frederick H. Marsh, 818th Air Division Missile Maintenance Officer, and Frederick J. Childress of Convair Astronautics, builders of the Atlas Missile.

The two Strategic Air Command officers and one civilian representative of Convair Astronautics will speak at Cortland on the 17th, York on the 18th, and Beatrice on the 25th.

"LETSCOOP" 13 Jan 61

Missile Experts Continue Tour

A three-man team of Atlas Missile experts from Lincoln AFB is scheduled to speak at three public meetings this month beginning with Cortland, Neb., on Jan. 17.

The team will then be in York, Neb., on Jan. 24, and Beatrice, Neb., on Jan. 25.

Col. Thomas G. Corbin, Commander of the 818th Air Division, who heads the team, announced recently that this month's tour is part of a plan which began in December with meetings in Avoca and Eagle, to address public meetings in each of the communities situated near the 12 new Atlas missile sites now under construction in this part of Nebraska.

The meetings are being held so that the public will more fully understand why Atlas Missile sites are being constructed in this area, what is involved in the construction program itself, and the role ballistic missiles play in the Strategic Air Command's new "mixed force" concept of aerospace power.

The "mixed force" refers to the manned bomber and long-range ballistic missiles as a smoothly blended system designed to preserve world peace through deterrence.

The team of speakers headed by Colonel Corbin includes Lt. Col. Frederick H. Marsh, 818th

Air Division Missile Maintenance Officer and Mr. Frederick J. Childress of Convair Astronautics, builder of the Atlas Missile.

The highly informative 1½-hour presentation on the giant Atlas includes a number of color slides showing the new silo type sites in minute detail, a 16mm sound movies documenting the development of ballistic missiles and ends with an open question and answer period.

OMAHA DISTRICT
THE LINCOLN STAR, LINCOLN, NEBRASKA
16 January 1961

OMAHA DISTRICT
THE LINCOLN STAR, LINCOLN, NEBRASKA
21 January 1961

Missile Team Will Address Beatrice Meet

Beatrice — A 3-man team of Atlas Missile experts from Lincoln Air Force Base has been invited to address a public meeting at the Beatrice City Auditorium at 8 p.m. Wednesday, Jan. 25.

The speaker's team headed by the ranking Strategic Air Command officer in southeastern Nebraska, Colonel Thomas G. Corbin who commands the 318th Air Division; Lt. Col. Frederick H. Marsh, Missile Maintenance Officer; and Frederick J. Childress of Convair - Astronautics will speak on the Atlas Missile sites now under construction in this part of Nebraska.

The program Wednesday night will feature an explanation of the Strategic Air Command's new intercontinental ballistic missiles and the role they play in the security of the U.S. today; the Atlas Missiles crews and their families as new members of the community; and the building of the Atlas Missile by Convair-Astronautics. Following the regular presentation which includes a new Air Force movie on missiles and satellites, the speakers will answer questions from the audience.

The meeting here Wednesday will be the 5th such public meeting held in cities and communities situated near the 12 Atlas Missile sites presently under construction. Future meetings are to be held at Nebraska City, Tecumseh, Seward, Brainard, Elmwood, Palmyra and Wilber.

Missile Experts Set For Confabs

Beatrice (W) — A 3-man team of missile experts will speak at public meetings this week in Beatrice and Cortland.

Heading the trio will be Col. Thomas G. Corbin, commander of the 318th Air Division, which will eventually include under its jurisdiction 12 launcher sites looping the southeast Nebraska area.

The hearing in Cortland will be Tuesday night. The one here will be at 8 p.m. Wednesday. The meetings are part of a series designed to explain missile operations to local groups.

York Citizens Hear SAC Missile Speaking Team

More than 700 people were on hand Wednesday evening at the York, Nebr., City Auditorium to take part in a public meeting at which they heard a three-man team of Strategic Air Command representatives discuss the new Atlas Missile sites now under construction in this part of Nebraska.

York is one of twelve communities within a 50-mile radius of Lincoln AFB where construction is already underway on the "silo" type Atlas missile sites.

The Wednesday night meeting at York was the fourth of a planned program initiated by Col. Thomas G. Corbin, Commander of the 818th Air Division, to speak at public meetings in each of the cities and towns which are located near the new Atlas sites.

"The need for these meetings," Colonel Corbin said, "is obvious. The advent of the missile era has created new weapons and new concepts in carrying our nation's defense policies."

"The people of Nebraska are among the first in America to become closely associated with the Strategic Air Command's new missile weapon system. We feel that it is important that the public understands what is going on."

Following his introduction by Mayor Miller of York, Colonel Corbin opened the program with a brief but detailed discussion of

the Strategic Air Command's role in the new era of long-range ballistic missiles.

Touching on the threat America faces today, he reminded the people of York: that the world-tensions of two years ago were not unlike those of today. But, he strongly emphasized that the measures necessary to meet that have changed drastically.

"Today," the division commander said, "we face an enemy tremendously more dangerous to our way of life than we did in the 1940's—an enemy dedicated to our annihilation."

The colonel reminded his audience that now, for the first time in our history, a potential enemy has the capability to launch direct attack against the United States mainland, and that with long-range ballistic missiles he can launch that attack within minutes.

"To counter this threat," Colonel Corbin pointed out, "The Strategic Air Command has maintained for more than a decade, a combat-ready alert system which provides the United States with an instantly ready retaliatory force capable of destroying an enemy's war-making capability, and making it totally unprofitable, if not suicidal to attack us."

He went on to point out that ballistic missile sites such as the Atlas sites being constructed in

(Continued on Page 9)

Speakers

(Continued from Page 3)

Nebraska, will take their place alongside the manned jet bombers in providing our country with the modern mixed force of missiles and bombers necessary to maintain our security.

Then, in explaining the reason for the placing of Atlas Intercontinental Ballistic Missiles in Nebraska, Colonel Corbin stated:

"To be effective as a deterrent force, and effective it must be if we are to survive, our long-range jet bombers and missiles must be dispersed over as wide an area as possible. This dispersal of retaliatory forces is necessary to make it as near to impossible as we can for an enemy to knock us out before we can strike back."

"This is why" he said, "the Strategic Air Command must spread out its forces over vast areas heretofore remote from military activities directly linked with our Nation's defense; why Atlas Missile crews will soon be living in a number of towns and cities throughout Nebraska."

Following a color film which covered the development and construction phases of the giant Atlas, Frederick J. Childress, who represents Convair-Astronautics, spoke in detail on the local-site construction programs.

In discussing the Atlas Missile "silo" type site being constructed near York and at other locations in Nebraska, Childress gave out some statistics.

"The silo" he pointed out, "is a round hole measuring 52 feet across and 174 feet deep. During excavation, 71,000 cubic yards of earth are moved. The sides of the silo are made of reinforced concrete that runs from about two feet thick at the bottom to about 9 feet thick at the top. Some 1,000 ready-mix truck loads of concrete are needed to pour the 6,000 cubic yards of concrete that go into the silo walls."

Childress went on to describe the engineering ingenuity ingenuity involved in the silo construction. "The steel frame-work within the silo" he said, "is equal in height to an 18-story building, weighs 1,500 tons and hangs, shock mounted on giant steel springs as big around and as long as a telegraph pole."

According to Childress, the shock mounting allows a two-foot "rattle space" between the framework and the concrete sides of the silo to prevent damage from earth tremors.

He also called attention to the fact that the Atlas sites will have their own source of electrical power and will be able to generate enough power to supply an average city of 20,000 population.

Then, touching on the control room which adjoins the silo, Childress pointed out that electrical wiring necessary to launch control would stretch from Lincoln to Dallas, Tex.

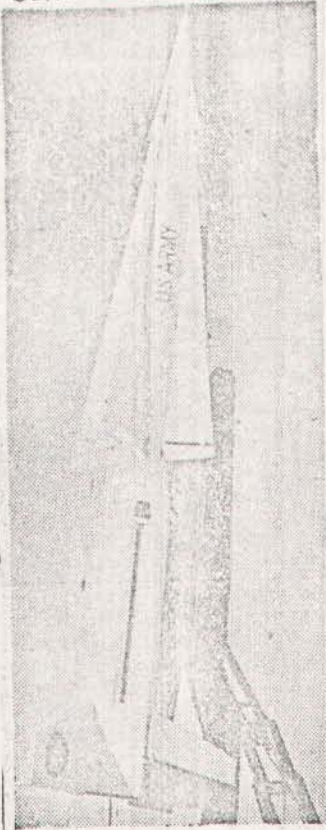
In closing, the Convair representative turned to the subject of local civilian employment. "has been estimated," Childress said, "that at the peak of the construction operation, the monthly payroll for the combined agencies will run about one and three-quarters million dollars."

"The Convair payroll will run about three-quarters of a million. There will be a gradual build-up of civilian personnel which will reach a peak in mid-1961 of almost 2600 families."

"About 1,000 of these families" he said, "will be re-located in the Lincoln and southern Nebraska area, and many will be looking for houses to rent in the towns close to the silos."

Childress said that it is Convair policy to hire locally as many qualified people as possible and that present forecasts call for hiring some 5-600 hundred local people between March and August of 1961.

To facilitate hiring, Convair Astronautics will open an employment office sometime in March and will have a representative travel from town to town to interview applicants.



Nike . . . ready

Missile Impact Continues

The Missile Age continues to have its impact on Lincoln and nearby towns and no slack is seen in 1961 — or later.

Twelve of Nebraska's 19 Atlas missile launching sites are near the Capital City. They will be encased in underground silos and construction-installation operations will continue through 1961.

Excluding the actual missiles and their vastly expensive electronic gear, the Lincoln complex costs will hit the \$45 million mark.

Total cost of all missile sites and installations in the state will be in the astronomical area of \$200 million.

Three Nike-Hercules defense missile sites are manned

and ready. They are at Crete, Agnew and Louisville.

Omaha will have 9 Atlas launchers, 6 in Nebraska. These are in clusters of 3 to a site, one at Mead, another at Arlington and the third at Missouri Valley, Ia. All are above ground sites, in contrast to Lincoln's underground, hardened concrete silos.

The Omaha sites have received actual missiles and probably will be declared operational soon.

Another Atlas site, a hardened one, is being built near Kimball as part of a Cheyenne, Wyo., complex.

OMAHA DISTRICT
COUNCIL BLUFFS NONPAREIL, COUNCIL BLUFFS, IOWA
6 February 1961

Atlas Missile Bases Operational In April

OMAHA — Atlas missile launching bases in the Omaha Lincoln area will not become operational until mid-April, a month or more beyond the latest public estimate.

The Air Force explained that it was necessary to provide additional time for proving the complex equipment with its own missile men doing the operating.

The target date for operation now is some four to five months behind the original goal. Earlier delays were caused by work stoppages, design changes and the like.

OMAHA DISTRICT
LINCOLN JOURNAL, LINCOLN, NEBRASKA
2 February 1961

Atlas Work On Schedule

Area System Is
76% Complete

Construction of the Lincoln Atlas missile system is on schedule, says project manager Mason Travis of Western Contracting Corp.

He said the system of 12 launcher sites ringing the Lincoln community is 76.6% complete.

"The weather has been pretty much in our favor and no union complications have occurred to slow down our schedule," Travis said.

Completion of the 12-site construction, for which the Army Engineers Corps is responsible and Western is the contracting firm, is scheduled for late July.

If the Offutt missile system pattern is followed at the Lincoln sites, the electronic installation work done by Convair under Air Force Ballistic Missile Division supervision will begin this spring.

OMAHA DISTRICT
THE LINCOLN STAR, LINCOLN, NEBRASKA
27 January 1961

Missile Meet Draws Many Despite Cold

Beatrice (UPI) — Despite near zero temperatures and blowing snow, some 450 residents of Beatrice attended the public meeting in the City Auditorium where they heard a detailed account of the Atlas Missile program now under way in southeastern Nebraska.

The team of Atlas Missile experts from Lincoln Air Force Base, who have also spoken at public meetings in Avoca, Eagle, Cortland and York in the past 6 weeks, was headed by Col. Thomas G. Corbin, ranking Strategic Air Command officer in Southeast Nebraska and commander of the 818th air division. Other speakers were Lt. Col. Frederick H. Marsh, 818th missile maintenance officer, and Frederick J. Childress of Convair-Astronautics. Queries Answered

At the conclusion of the regular presentation, which included detailed slides showing missile site construction and a 16-millimeter movie on Air Force and movie on space satellites, Col. Corbin answered questions from the audience for more than 30 minutes.

Beatrice is one of the cities and towns in southeast Nebraska situated within a few miles of the 12 new Atlas Missile "silo" type sites presently under construction.

During February and March the LAFB speakers plan to appear at public meetings in Nebraska City, Elmwood, David City, Seward, Palmyra, Tecumseh, and Wilber.

"Journal" 6 Feb 61

Atlas Base

Activation Is Delayed

*New Target Date
Month Off Schedule*

Omaha (AP) — Atlas missile launching bases in the Omaha-Lincoln area will not become operational until mid-April, a month or more beyond the latest estimate made public.

The Air Force said the reason for the delay is to provide an additional period for proving the complex equipment with its own missile men doing the operating.

The new target date is some 4 to 5 months behind the original goal. Earlier delays were caused by labor stoppages, design changes and the like.

Under the training program being planned civilian technicians of Convair Astronautics and other companies working on the project probably will work with Strategic Air Command missile men during the extra month.

"STAR" 14 Feb 61

Man Dies In Truck Mishap Near Lincoln

Robert P. Forey of Omaha was fatally injured Monday noon when the truck he was driving rolled over on State 2 about one mile east of 48th St.

Forey, 37, was employed by the Power Engineering Co. of 6317 Havelock in Lincoln, but lived in Omaha.

Chief Dep. Co. Atty. William Blue said Forey's west-bound truck went off onto the north shoulder of the road, swerved across the highway and rolled over into a ditch on the south side of the road. Blue said Forey was thrown from the truck and it rolled over him.

Blue said Forey was pinned under the truck and died shortly after being taken to a Lincoln hospital.

Forey's death was the second traffic death in Lancaster County this year compared with none at this time a year ago.

15 Feb 61 "STAR"

Morrison Visits LAFB Facilities

Gov. Frank Morrison will make his first official visit to the Lincoln Air Force Base Wednesday at the invitation of Col. Thomas G. Corbin, commander, 818th Air Division.

Col. Corbin and other senior officers will give the governor a detailed briefing of the air command mission and the role of 818th Air Division and escort him on a tour of the base.

After the tour, Gov. Morrison will visit one of the 12 new Atlas missile sites now under construction in southeastern Nebraska. To conclude his visit, the governor will be honored at a luncheon in the officers club.

Governor Given Glimpse Of LAFB Defenses

By Virgil Falloon

Gov. Frank Morrison was given a glimpse of the Strategic Air Command's defense capabilities in the space age Wednesday in a tour and briefing at Lincoln Air Force Base.

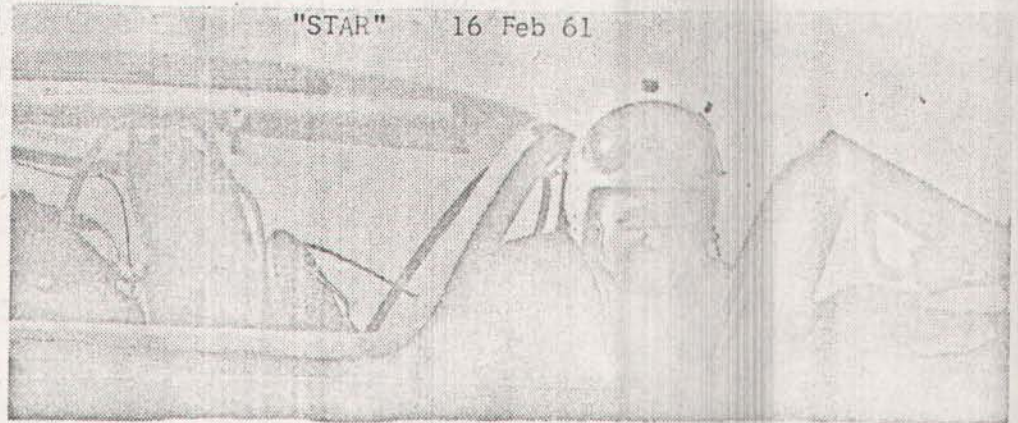
Nebraska's chief executive made his first official visit to the SAC base as guest of Col. Thomas G. Corbin, 818th Air Division commander.

Beginning shortly after 9 a.m., the governor and his administrative assistant, Norman Otto, were briefed in detail on the mission and role of the air division and base, both as to its manned bombers and Atlas missile program.

Then at the base's "alert shack," Gov. Morrison heard the "whistle" blow and watched combat-ready crews race to their waiting B-47 stratojet bombers.

The "bravo" alert ends when engines of all planes have been started, ready for takeoff. Something less than

"STAR" 16 Feb 61



GOVERNOR . . . "checks out" in B-47. (Star Staff Photo.)

6 minutes had elapsed until the last plane would also have been on its way.

After lunch, the governor was flown by helicopter to an

Atlas missile site northwest of the base — about 20 minutes distance. It is one of 12 in this region.

He was conducted through

the missile's underground silo by Col. Vernon Hastings and Lt. Col. H. L. Schroeder, who are in charge of the missile construction program in this area.

After the 6½-hour tour, Gov. Morrison said he was "very much impressed with the base and its personnel — especially their dedication to duty."

On the missile installation, the governor said "every American ought to have the opportunity to see this."

"It's our chief contact in Nebraska with the space age," he said. "It represents millions and millions of dollars, but it is only the beginning of what's necessary if we're going to compete with Russia and other countries in the utilization of space."

Missile Experts Planning Meet At Nebraska City

Nebraska City — Mayor Evin Rogers has announced that a 3-man team of Atlas missile experts from Lincoln Air Force Base will address a public meeting here Tuesday, Feb. 21, at the National Guard Armory.

The speaker's team headed by Col. Thomas G. Corbin, commander, 818th Air Division, with Lt. Col. Frederick H. Marsh, 818th missile maintenance officer, and Frederick J. Childress of Convair-Astronautics, will speak on the Strategic Air Command's new Atlas missile program and how it affects the residents in this area.

Approximately 1,300 persons attended the missile meetings held last month in Cortland, York and Beatrice.

Tour Planned by Governor

Morrison Will Visit Base, Missile Sites

Lincoln (AP) — Gov. Frank Morrison will make his first visit to the Lincoln Air Force Base Wednesday at the invitation of Col. Thomas G. Corbin, commander, 818th Air Division.

After a tour of the base, Governor Morrison will visit one of the 12 new Atlas missile sites now under construction in Southeastern Nebraska.

A new million-dollar liquid oxygen plant at the base will be inspected by Southeastern Nebraska newsmen Thursday. The plant is one of two new major structures at the base directly connected with the Atlas ICBM program.

AF Slates Tour Of Oxygen Plant

A new million dollar liquid oxygen plant at the Lincoln Air Force Base will be inspected by southeastern Nebraska newsmen Thursday.

The plant is one of two new major structures at the base directly connected with the atlas ICBM program and its 12 "silo" type sites located within a 50-mile radius of the base.

Operating on a 24-hour basis, the plant will produce liquid oxygen and liquid nitrogen for the Atlas missiles, and also will provide "breathing" oxygen for B47 and KC97

crews. A missile maintenance building is still under construction at the base.

OMAHA DISTRICT
LINCOLN JOURNAL, LINCOLN, NEBRASKA
16 February 1961

LAFB's New Liquid Oxygen Plant Shown; Output Is 28 Tons Daily

By Ron Gibson

Nebraska's most exotic gas station—a liquid oxygen manufacturing plant at Lincoln Air Force Base—was shown off for the first time Thursday.

The million-dollar plant now nearing completion, can produce 28.2 tons (about 5,000 gallons) of liquid oxygen or LOX daily. Liquid oxygen is one of the two fuel components of the Atlas missile.

The Lincoln plant will manufacture LOX for the 12 Atlas missile bases which circle the city. It also produces liquid nitrogen, used for freezing and drying.

The new plant will perform a 3rd function. Its liquid oxygen is also to be used for breathing oxygen by LAFB

air crews, which are now supplied by a smaller plant.

The LOX plant looks like a giant still.

Air Compressed

Ordinary air is compressed rapidly, to a pressure of 3,000 pounds per square inch. Heat created by the tremendous compression is drained off and the compressed air is then rapidly decompressed to a pressure of 70-80 pounds.

The rapid decompression plunges the temperature of the oxygen to the point where it becomes liquid—at minus 297 degrees Fahrenheit. This, then, is LOX.

When mixed with Rocket Propellant-1 in the combustion chamber of an Atlas, LOX ignites and sends the missile roaring on its way.

This sort of fuel is cantankerous and hard to handle.

The plant's production will be tank-trucked to the 12 sites.

LOX is a pale blue liquid. "If you poured it out of a container, it probably wouldn't hit the ground," said Maj. Arthur W. Rasco, LOX plant officer. "It would just dissipate in the air."

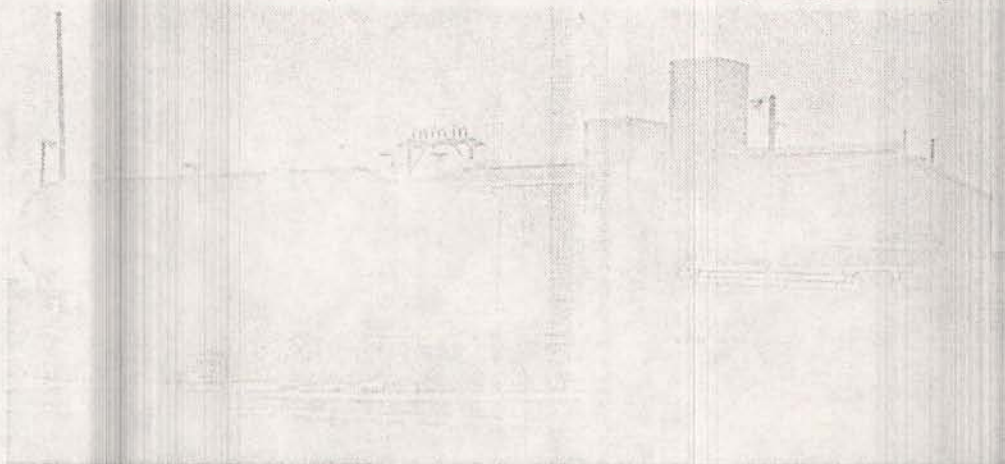
But—

Can Burn

If you get some of the stuff on you, you suffer the equivalent of a 3rd degree burn. If LOX contacts any petroleum-base product, there is instant combustion.

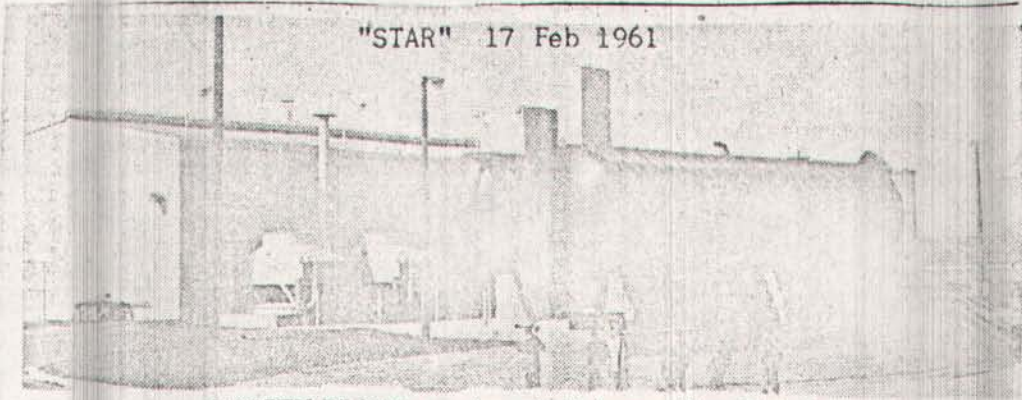
An explosion would probably destroy the plant, Major Rasco said, but wouldn't damage B47 jet bombers parked only 100 yards away.

Still, Maj. Rasco said, he's giving up pipe-smoking.



Lincoln Air Force Base's \$1 million liquid oxygen plant.

"STAR" 17 Feb 1961



OXYGEN PLANT . . . for missile bases. (Star Photo.)

Oxygen Plant Near Operation Stage

By Del Harding

The \$1 million liquid oxygen plant which will supply the 12 Lincoln-area Atlas missile sites was thrown open to newsmen for a tour Thursday.

The plant, scheduled to be in operation in about a month, will provide liquid oxygen for the fuel system of the Atlas intercontinental ballistic missiles and also will manufacture liquid nitrogen for use at the Atlas sites.

Maj. Arthur W. Rasco,

plant commander, said the plant will be capable of producing 5,000 gallons of liquid oxygen daily. A secondary function will be production of "breathing oxygen" for Lincoln Air Force Base aircraft.

Trucked To Sites

Two 28,000 gallon tanks adjacent to the plant provide storage space for the liquid oxygen and nitrogen. Truck trailers will load up at the plant tanks and then tour the 12 Atlas sites within a 50-

mile radius of Lincoln to stock similar storage tanks at the launching sites.

Maj. Rasco said the basic procedure for producing the liquid oxygen and nitrogen is taking normal air such as that we breath and then compressing it to a pressure of 3,000 pounds per square inch. Then the air is rapidly decompressed to a pressure of about 70 to 90 pounds per square inch and the result is liquid oxygen and nitrogen, which is then refined for use.

Dissipates

Constant replenishing of the storage tanks at the plant and at the missile sites is necessary because the tanks' contents are not stored under pressure and therefore dissipate into the atmosphere.

The liquid oxygen is highly volatile. Maj. Rasco conceded that an accident at the plant itself could result in the plant being "obliterated."

But he said the damage would probably not extend as far as the base flight line about a half-mile away, and that certainly Lincolmites need have no fears along this line.

Is Missile Lag Really On Bases?

26 Feb 61

Experts May Ask Speedup

Chicago News World Service
Washington — President Kennedy is momentarily expecting the information he has requested to help him make a judgment on the state of America's defenses.

What about the "missile gap?" What about the U.S. capacity to fight "brush fire" wars? Should more money be spent on defense beyond the \$41.9 billion recommended by President Eisenhower?

These are among the questions covered in a Defense Dept. reappraisal now being completed on orders from the new commander-in-chief.

Military experts here believe they know the line of thinking that will be suggested to Kennedy on the question of whether the U.S. missile effort is great enough to match that of the Russians.

Short of Base

If they are right, the President's attention will be called to the urgent need of breaking the bottleneck in the construction of missile bases.

"We can turn out Atlases pretty fast now but we don't have the bases to send them to, once they're built," an expert explained.

About 25 bases have been programmed for the 27 squadrons of Atlas and Titan intercontinental missiles now being produced. But to date, only two are finished and in use — one in California, the other in Wyoming.

These 27 squadrons represent a total of 270 missiles. It's not thought likely that the President will decide to increase this number. His view is expected to be the same as Eisenhower's on this.

New Missile

It might be expressed along these lines:

"We have a new push-button missile coming along, the Minuteman. Let's give that priority, instead of spending any more money on these less-efficient first generation missiles."

In the meantime, however, the President will have to decide whether he wants to put part of the bombers of the Strategic Air Command in the air on a continuous alert.

"There's no way of putting even a small percentage of the bomber force on alert inside of 6 months," authoritative sources say. "To put 25 per cent on alert would require a year."

OMAHA DISTRICT
OMAHA WORLD HERALD, OMAHA, NEBRASKA
27 February 1961

Site Builder Atlas Loser

12 Millions Is Guess of Sioux City Man

World-Herald Washington Bureau.
1229-22 National Press Building.

The contractor building the Atlas missile sites around the Lincoln Air Force Base is projecting a 12-million-dollar loss for the job.

That was the testimony, made public Sunday by the House Appropriations Committee, of Garland Everist of Sioux City, Ia., president of the Western Contracting Corporation that is constructing the 12 operational bases where the giant Atlases will be situated.

Fixed Price Criticized

Mr. Everist was highly critical of the fixed-price policy under which his company bid for and won the contract and proposed that all existing fixed-price construction contracts in the ballistic missile program be converted to a cost reimbursable basis.

He was one of several heard by the committee. Others also told of losing money. An exception was Peter Kiewit Sons of Omaha.

The Sioux City contractor pointed out that the Lincoln job meant construction of hardened sites over an area as large as the state of Connecticut.

Lot of Changes

He said that the Government, in developing the Atlas at the same time complexes were being built, had brought "a continuous stream" of changes, modifications and design growth.

Modifications have affected 312 pages of the 476 pages of specifications, he declared; there have been 1,214 new drawings; modifications have

One critical piece of electrical control equipment has been modified eight times, said Mr. Everist.

When modifications take place, the contractor submits claims to the Government for the additional cost involved. On those claims denied, the contractor can go to court.

"The financial burden of performing a fixed-price contract which originally was \$17,400,000 and which ultimately will grow to 48 million dollars is enormous," Mr. Everist said.

'No Problems'

But Thomas H. Paul, vice-president of Kiewit, declared:

"If the contractors have been asked to this hearing to tell about their troubles or problems, I would like to say that we have no problems that cannot be handled equitably under the standard form of Government contract under which we are working."

Kiewit is building a Titan ICBM project at Beale Air Force Base, Marysville, Cal.

Mr. Everist pointed out that Titan bases have three areas of construction and two years to do the job, while Atlas bases have 12 areas of construction to be performed in 13 to 15 months.

1 Fatality At Cortland Site

Lincoln area Atlas construction, scheduled to be completed by mid-1961, is somewhat similar to the Roswell installation. The Lincoln construction has claimed one life and recorded one serious injury as a result of work in the silo pits.

A 24-year-old worker fell to his death last November while tying reinforcing steel together on the wall of the Atlas missile silo near Cortland. He was Delbert T. Ryan of St. Peter, Minn.

Another workman recovered from serious injury caused when he was working at the bottom of the silo pit and was struck by a piece of piping which dislodged and fell. The worker, Howard Neiswanger of Lincoln, was saved from death by a safety hat he was wearing while working at the Atlas site near Wilber.

Atlas Site Builder Blames

Army Engineers

"JOURNAL" By Warren Zimmerman 27 Feb 61
The Journal Bureau

Washington—The president of the company that is building 12 Atlas missile sites near Lincoln has told a House committee that his company expects to lose \$12 million on the project as a result of modifications in the original contract. Garland Everist, president of Western Contracting Corp.

Garland Everist, president of Western Contracting Corp. of Sioux City, Ia., blamed the Army Corps of Engineers for most of the losses Western expects.

Everist spoke before the military construction subcommittee of the House Appropriations Committee in testimony which has just been released.

Held to Contract

He said that, despite modifications in 312 pages of the original 476 pages of specifications, Western was being held to its original contract completion date this summer.

Everist said:

"Our efforts to proceed are rendered ineffectual by the lack of prompt and unambitious direction from the Corps of Engineers for successful handling of the day-to-day problems involved in such unusual work. The lack of unitary action in the program results in wasted efforts, inefficiency, low productivity and greatly increases the overall cost."

Convair Accused

Everist also said that Convair Astronautics, which is building the Atlas missiles themselves, were responsible for delaying work at sites

because of refusal to accept completed portions of the steel crib in which the missile will be housed.

"Convair people are swimming all over the sites," Everist said, "apparently checking out the work we are doing so when they take it from some other agency, they will have approved it at some previous point."

Everist was asked by subcommittee chairman Harry R. Sheppard (D-Calif) "insofar as Convair is concerned, they are not intervening into the picture to retard your function timewise?"

Answer is Yes

Everist answered, "Yes, they are, in their relationship with the Corps of Engineers."

Everist complained that Western's contract was with the Corps of Engineers, yet Convair, the Air Force and others also were evaluating it.

"Validation of portions of this work we are doing apparently has to be done by Convair before we can sell it to the Corps of Engineers," he said.

He said that the corps original contracting officer at Lincoln told him that the Corps was "solely responsible for the execution of the work. Delays could be paid for, but time extensions could not be given."

"He was half right; no extensions were given, but de-

lays were not paid for either, so we wound up by financing delays."

"He was half right; no extensions were given, but delays were not paid for either, so we ended up by financing delays, or the delays of the program."

Everist noted that as of Feb. 1, "our contract was 80% complete, and is on the original progress schedule."

He added that total contract modifications cost Western \$23 million and that the Corps of Engineers has allowed payment of only \$3 million.

The rest of the money is in controversy.

Asked if he felt that Western was entitled to \$23 million, he replied, "We would probably settle for less."

Everist was one of several corporation executives who testified in favor of a change in the type of contract that is used in the construction of missile sites.

As now set up, the contract is awarded the low bidder, who is often made to bear the expense of later changes in the original contract.

The change recommended would allow the contractor a set fee and would compel the government to absorb the extra cost of contract modifications.

Western was awarded a \$17,400,000 contract for 9 Atlas sites in the Lincoln area. The figure was raised to \$24 million when 3 new sites were added. By Everist's testimony, the cost of later modifications was almost as much as the sum in the revised contract, and Western was forced to foot most of the bill.

"We have no quarrel with the federal government," commented Western Project Manager Mason Travis in Lincoln.

He indicated that as long as

there were regular technological breakthroughs in missile development, these changes will be added to any missile building.

Travis said the developments particularly have hit the Atlas F or silo, hardened sites like the one here, and at Salina, Kan., Altus, Okla.,

Abilene, Kan., Dyas, Texas and Roswell, N.M.

"I look for the same construction complications to be experienced when the Minuteman missile is ready for a national program," Travis said.

As of today, Travis said Lincoln's 12 sites are 85% complete.

"STAR" 27 Feb 61
Missile Base

Work 'Mess'

Congressional investigators said Sunday the Air Force missile base construction program is a "mess," with costs up \$100 million over estimates, and the contractor for Lincoln area Atlas sites said modifications had added 1,214 technical drawings to the original contract. Story on Page 13.

"STAR" 27 Feb 1961

Missile Base Work Said 'Mess'

By David Barnham
United Press International
Washington (UPI) — House investigators said Sunday the Air Force program for construction of missile launchers is in a mess, with cost estimates now running nearly \$100 million higher than original contracts.

The new estimates were disclosed by the House Military Construction Subcommittee in a report on an inquiry into elaborate missile sites now being built at some 20 Air Force bases in the United States.

Commenting on testimony taken behind closed doors, subcommittee chairman Harry R. Sheppard, D-Calif., said "any way you look at this program things are in a mess."

He said there had been

some improvement in the last few months but "all too long this program has been characterized by a failure of top-level management to exercise proper control."

In a chart prepared for the investigators, the Defense Department said final construction costs now are estimated at \$992 million, as against costs of \$899 million in the original contracts.

Sources close to the subcommittee told United Press international that actual work was 6 to 9 months behind original schedules.

Testimony from 29 military and construction witnesses sharply etched the problems encountered by the Air Force, Army Corps of Engineers and contractors in building the multi-million dollar missile system.

The contractor building a missile site near Ellsworth Air Force Base, S.D., told the subcommittee there had been 119 required changes in the launchers between December 1959, and Feb., 1961. He estimated these changes would add more than \$16 million to the original \$28 million contract.

The contractor working on an Atlas base surrounding Lincoln Air Force Base, Neb., said modifications had added 1,214 technical drawings to the 355 drawings included in the original contract.

Most of the contractors were highly critical of the Defense Department but conceded that the nation's need for missiles was an overriding consideration.

Garland Everist, president of the Western Contracting

Corp. of Sioux City, Iowa, said "our efforts to proceed are rendered ineffectual by the lack of prompt and uninhibited direction from the corps of engineers for the successful handling of such complex and unusual work."

A number of contractors called on the government to drop its present fixed-price contracts on missile work and adopt a contract which would give the builders a guaranteed profit.

"STAR" 2 Sept 61

Missile Contractor Critical Of 'Lack Of Unitary Action'

... Everist Attacks Military Fiscal Policies

Washington (AP) — A contractor building a system of missile bases in the Lincoln area has complained to Congress that "lack of unitary action" is causing "wasted effort, inefficiency, low productivity and greatly increases the over-all cost."

The contractor, Garland Everist of Sioux City, Ia., told a House appropriations subcommittee military fiscal policies have created an enormous financial burden for him.

Everist is one of a group of contractors heard by the committee as it probed delays and what Chairman Harry Sheppard, D-Calif., called "a mess" in the missile base program.

Everist said his company, Western Contracting Corporation, submitted the low bid of \$17.4 million to build 9 bases, with final completion scheduled for May 23, 1961. The contract later was augmented to provide for 12 bases.

Contract modifications to date, he said, have affected 312 pages of the original 476 pages of specifications, and 1,214 new drawings have been made.

"The magnitude of change within the program," he said, "looms larger each day. This acts to deter the timely and economical completion of the construction work. Our efforts to proceed are rendered ineffectual by the lack of prompt and uninhibited direction from the Corps of Engineers for successful handling of the day-to-day problems involved in such complex and unusual work."

'Enormous Burden'

The financial burden of performing a fix price contract which originally was \$17.4 million and will grow to \$48

million, he said, is enormous. He said the modifications were "forced upon us with no extension of contract time."

Everist said supplemental payments have not been of the magnitude that "reflects the cost to us." He added that his company, its subcontractors and supplies "have been required to finance the federal government in this undertaking" and at present "we project a \$12 million loss at Lincoln."

He requested prompt congressional action for the immediate payment for the cost of work and services.

Asked if he wanted the contract changed from the fixed-cost type to a cost-plus basis, Everist replied.

"To a cost reimbursable contract. As far as I am concerned, this plus part you can leave out. I am trying to get rid of the minus part of it."

Change in Atlas Site Plans Cited

"JOURNAL"

1 March 1961

More than 50% of the original plans for Atlas missile sites have been changed since construction began in the Lincoln area, according to Col. John Minahan, Corps of Engineers area engineer.

Speaking to the Engineer's Club of Lincoln, he said this

was primarily because of changes in the missile itself and overall structure of the silos.

"The major problem we have faced is the forever flowing underground rivers," Col. Minahan said.

"We have had to set up elaborate de-watering systems, pumping water constantly out to the nearest river or run-off ditch."

The most water was at the Seward site, retarding construction by 90 days.

"As to the report that 85% of the sites are complete, this does not mean we are almost through. The final 15% will be the hardest," the colonel reported.

"However, the Engineers expect to have their work complete this summer," he concluded.

OMAHA DISTRICT
WORLD HERALD, OMAHA, NEBRASKA
1 March 1961

Water Problem at Missile Sites

Lincoln (AP)—An engineer for the Atlas missile sites in Nebraska said Tuesday that more than 50 per cent of the original plans for the installations have changed since construction began.

Col. John Minahan, area engineer for the Corps of Engineers, said the changes were due primarily to changes in the missile itself, and the over-all plan for the silos.

"The major problem we have faced is the forever flowing underground rivers," Colonel Minahan said before the Engineers Club of Lincoln.

The most water was at the Seward site, retarding construction by 90 days.

OMAHA DISTRICT
THE LINCOLN STAR, LINCOLN, NEBRASKA
2 March 1961

'Missile Sites Bring Security'

Lincoln Star Special
Elmwood — Any way you look at it, construction of Atlas Missile sites in Nebraska assures security.

Economically, jobs are opened.

Defensively, weak links are closed.

Generally, this theme was presented here Wednesday night by Col. Thomas Corbin, commander, 818th Air Division; Lt. Col. Frederick Marsh, missile maintenance officer; and Frederick Childress of Convair-Astronautics.

Elmwood is one of 12 communities near Atlas Missile launch-sites now under construction in southeastern Nebraska. All sites are within a 50-mile radius of Lincoln.

Other meetings this month will be held at Tecumseh and Palmyra. April's meeting list shows confabs at Seward, Wilber and Brainard.

The meetings are set up to explain functions of the sites.

Missile Defense Need Cited For Legislature by Trudeau

"LINCOLN EVENING JOURNAL"

3 March 1961

By Ellis Rell

A pressing need for an effective anti-missile defense system and stepped up civil defense was outlined in Lincoln by one of the nation's top military-statesmen.

He is Lt. Gen. Arthur G. Trudeau, the Army's chief of research and development, who opened the governor's "Heartland Forum" with an address to the Nebraska Legislature.

Gov. Frank Morrison's Heartland Forum program will bring into the state leaders in government, military, business and labor to present issues of the day.

Gen. Trudeau, known as the father of the Army's Nike-Zeus anti-missile missile, told the Legislature that it is important to Nebraskans that an anti-missile defense system will be developed, not only to meet the ICBM threat of today but to defend against missile threats of tomorrow.

It will take about 4 years after congressional authorization and funds for production of the Zeus to have the anti-missile defense system operational, he said.

Gen. Trudeau said he believes the Zeus is well enough developed to begin production on it.

The defense budget for the next fiscal year, sent to Congress by the outgoing Eisenhower administration, provided \$250 million for testing the Nike-Zeus. No funds for actual production were included.

Gen. Trudeau is pushing for an addition of \$270 million so that the program can be accelerated and units of the missile can be on the firing line by 1964.

In Nebraska, Omaha is the Strategic Air Command headquarters and a SAC air base is located at Lincoln. Both cities are in the process

Continued on Page 8, Col. 7

Trudeau:

Nation Must Take Stock

Continued from Page 1
of being ringed by missile sites.

"This defense problem is not only an Army problem—it is a problem for the entire nation," he told the Legislature.

Gen. Trudeau said there is "a growing need for Americans in this land to become more security conscious."

"Time is fast approaching when we must take stock of our civil defense—critically re-examine its structure to see we have taken all measures necessary for protection of our people," he said.

An effective anti-missile defense system and an adequate civil defense program "means throwing away of the two-edged sword demanded by today's challenge," he said.

"Should the Soviets be first to develop an effective anti-missile missile and install it as protection for crucial centers of their population, industry and military might—they will have taken a giant step toward neutralizing the retaliatory striking power of the free world," the development chief warned.

Most Powerful

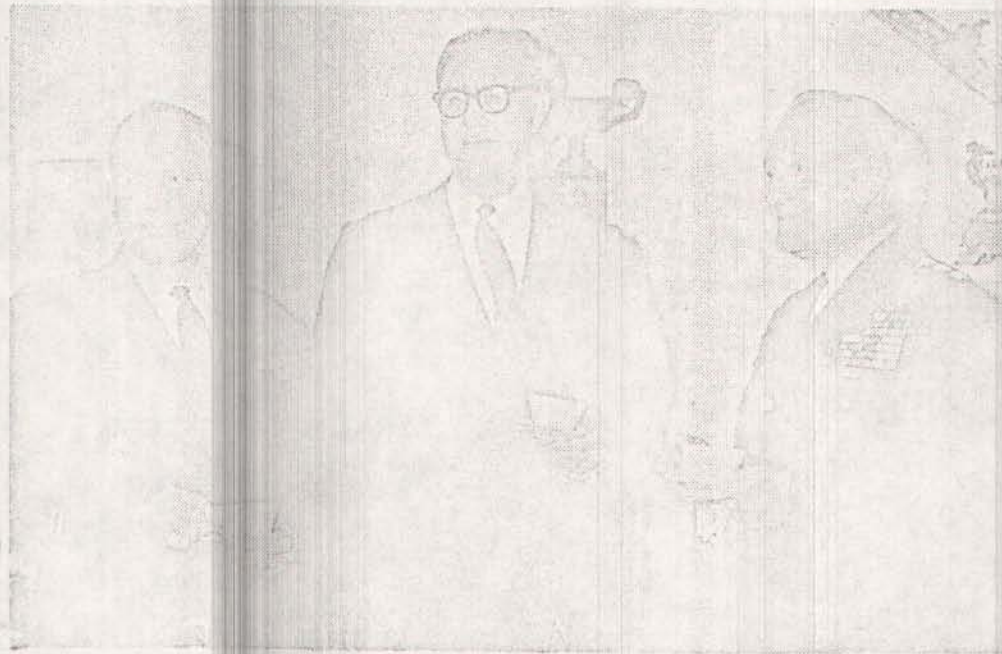
He said the 450,000 pound thrust Zeus booster engine is the most powerful single-unit, solid propellant motor successfully fired in the free world.

"There is an urgent requirement for such a defensive weapon while we seek a meaningful peace," he said.

It has already been proven that there "is no magic" in knocking down a ballistic missile. With the computer equipment available, he said, it is not too great a trick to track a missile.

No defense system is fool-proof, he warned, and businesses, factories and homes should be equipped with fall-out shelters.

He noted some people are now building their own shelters, but most are confused and looking for more guidance, which he indicated would be coming from Washington.



Mansion visit by (from left) Col. Don Simon, former Lincolnite, Gov. Morrison and Gen. Trudeau precedes Unicameral talk.

Decision Still Awaited On LAFB Future Use

"STAR" 3 MAR 61

Washington (AP)—The question of whether the Lincoln, Neb., Air Force Base will be continued as an airdrome for manned bombers or used chiefly as a launching complex for Atlas ICBM's still awaits decision.

Nor has the Strategic Air Command indicated up to now how long the present two wings of B47 medium bombers will be kept in service.

If the Air Force decides to replace the older B47s with newer designs at Lincoln, the replacements could be either the B52 long range heavies or the supersonic B58 mediums.

The program for change-over from B47s to newer aircraft started more than two years ago. For each new B52 wing going into operation two B47 units are disbanded.

Total Limited

The replacement program in the medium bomber field is on a one-for-one basis—one B58 wing for one B47 outfit.

However, the total of B58s to be produced is limited, indicating that only a few B58 wings will be equipped.

By next July, the Air Force expects to have 14 B52 heavy bomber wings in operation.

In addition to the two B47 wings, Lincoln AFB also has a KC97 tanker squadron and one Air National Guard interceptor outfit. This squadron presently flies the older F36 Saberjets, but under the modernization program is expected to be re-equipped with supersonic fighters.

Launchers Under Way

Construction of "silo" type launching sites for missiles, placed in the general area of Lincoln AFB, began last April. This construction will require from one and a half to two years for completion.

When the launching sites are completed, checked out and the missiles on hand, the 551st Strategic Missile Squadron of SAC will be ready for business.

Probers Want Missile Czar

Building Of Bases Assailed

"JOURNAL" 3 Mar 61

Alarmed Over

Contract Costs

Compiled From News Wires

Washington — House investigators charged that sloppy management threatens the completion of the nation's billion dollar missile base program and may push construction costs to "alarming proportions."

They called for the immediate appointment of a construction czar to "bring order and direction" to the program.

The sweeping indictment of Air Force construction management came from a House appropriations subcommittee. It heard evidence indicating the program will cost about \$100 million more than the original contracts.

Full Responsibility

The subcommittee said "immediate remedial action must be taken to successfully prosecute this essential defense program" and estimated construction costs for the missile bases would approach \$2 billion during the fiscal year beginning July 1.

"It is essential," the report said, "that the present divided, duplicating and often indefinite responsibilities be eliminated . . ."

The House group said the construction czar "should be charged with the full responsibility for the successful prosecution of this program and given complete authority to fulfill this responsibility."

The report said the "division of responsibility within the Air Force and the Corps of Engineers coupled with an abnormally large number of change orders and modifications . . . threaten to push costs to alarming proportions."

Cost Estimates

While the Air Force apparently has solved the problem of providing the missiles, the committee said, "it has not, however, solved the many major problems besetting the construction portion of this program."

Another program fault, the committee said, "is the inadequate authority of the contracting officer to promptly negotiate with the contractor for the settlement of change orders."

"He has been drastically hampered by far too many people constantly looking over his shoulder and by restrictions placed upon him not to exceed a certain percentage of the government estimate . . . which in many instances have been grossly inadequate."

As an example of "grossly inadequate" cost estimates for plan changes, the committee cited the Lowry Air Force missile base in Colorado. It said preliminary estimates ranged from \$51,011 to \$500,000, while the final settlement cost was \$4,937,373.

OMAHA WORLD HERALD
Report Urges
Mar 6
Missile Czar

'Construction Snafus Threaten Program'

Washington (AP)—The House Appropriations Committee Friday called for a "czar" over the missile program to cut costs and end divided responsibility.

It acted on recommendation of a subcommittee which recently heard testimony that the program has been delayed and costs increased because of divided and duplicated responsibilities.

While the Air Force apparently has solved the problem of providing the missiles, the committee said, "it has not, however, solved the many major problems besetting the construction portion of this program."

'Alarming Proportions'

It said divided responsibility within the Air Force and between it and the Army's Corps of Engineers, "coupled with an abnormally large number of change orders and modifications and other problems, threaten to push costs to alarming proportions."

The present set-up, the committee said, "threatens the well-being of the entire system," and added:

"It is essential that the present divided, duplicating and often indefinite responsibilities be eliminated and an organizational structure provided which will give specific authority and continuity of direction to the program."

'Complete Authority'

To direct the entire program, the committee said, there should be "a single head responsible directly to the Chief of Staff and the Secretary of the Air Force."

"The person filling this position," the committee said, "should be charged with the full responsibility for the successful prosecution of this program and given complete authority to fulfill this responsibility."

Another program fault, the committee said, "is the inadequate authority of the contracting officer to promptly negotiate with the contractor for the settlement of change orders."

"JOURNAL" 4 Mar 61

Col. Denton Missile Chief

*Californian Heads
LAFB Squadron*

A former United Air Lines pilot is Lincoln Air Force Base's new Missile Squadron Commander.

He is Colonel Edward P. Denton, of Bakersfield, Calif., a veteran Air Force pilot, with more than 9,000 flying hours.

Before entering the Army Air Corps in 1940, he was a pilot for United Air Lines on the Pacific run from San Francisco to Hawaii.

Colonel Denton has commanded B-47 bomber and KC-97 tanker squadrons, prior to coming to LAFB.

His last assignment was at Offutt Air Force Base, 9 miles south of Omaha, as Deputy Commander for the 566th Strategic Missile Squadron.

The 551st Strategic Missile Squadron at LAFB will become operational Apr. 1, 1961.

On that date, the squadron will activate its administrative section, assume responsibility for supply accounting, and begin a pre-training program. This program will precede individual training to be given at another base.

Complete activation will not take place until the missiles arrive.

Colonel Denton has more than 15 years of active duty, and is a rated command pilot.

His family is due to arrive in Lincoln during June, 1961.



Col. Denton

"JOURNAL" 4 Mar 61

Missile Mess Denied

*AF Chief Cites
Complexities*

Washington (UPI) — Air Force Secretary Eugene Zuckert has denied that the billion dollar intercontinental missile launching pad program is in a "mess."

Zuckert, in answer to a House appropriations subcommittee, said that "difficulties have arisen because of the complexity" of the construction program, but the total cost would be only about 4½% more than the amount congress approved.

The House subcommittee had charged the program had been crippled by sloppy management and numerous order changes and modifications.

"Since the program was started," Zuckert said, "we have extended the Atlas ICBM program 72%, without additional appropriations. The survivability of the forces... has been increased 5-fold."

"We do not intend to subsidize inefficiency nor other management shortcomings, but we will cooperate to see that valid claims are promptly and fairly settled," he said.

The secretary said that target dates for completing the bases will be met for the most part, "there will be some slippage in the early sites, but the later ones should be on schedule."



Zuckert

Man Killed At
"STAR" 7 MAR 61
Missile Site

Milo J. Olson, 40, of Sioux City, Iowa, was killed Monday in an accident at the Elmwood missile site.

Olson, a welder for Western Construction Corp., was working on the wall of the lowest level of a missile silo when a vise was knocked from a tripod on the 3rd level.

Company officials said the vise fell 107 feet and struck Olson in the head.

An investigation into the accident was under way.

The family had been staying at Crete.

Missile Speakers "STAR" & Mar. 61 Slate Visits To 3 Communities

Three more southeastern Nebraska communities will be host this month to the Atlas missile speakers from Lincoln Air Force Base.

The speakers will be at meetings in Palmyra Wednesday, Wilber on the 15th and Tecumseh on the 22nd.

The 3-man team of speakers headed by Col. Thomas G. Corbin, commander, 818th Air Division, has addressed more than 2,200 persons in previous meetings in Avoca, Eagle, Elmwood, Cortland, York, Beatrice and Nebraska City.

Col. Corbin said this month's tour is part of a plan which began last December to address public meetings in each of the communities situated near 12 new Atlas missile complexes under construction in southeast Nebraska.

Order Major Change In AF

STAR! 18 March 1961

Washington (UPI) — Deputy reorganization to the defense Secretary Robert S. McNamara Friday announced a sweeping Air Force reorganization designed to carry forward a March 6 directive giving the Air Force nearly all responsibility for military space programs.

The shift, involving more than \$3 billion, consolidated all Air Force space, weapons, communications and warning systems under Lt. Gen. Bernard A. Schriever, chief of the air research and development command. Big loser was the Air Materiel Command.

The announcement came as chairman Overton Brooks, D-La., of the House Space Committee accused McNamara and other Defense Department officials of "foot-dragging" in a committee inquiry into the order.

Difficulty

Brooks made the charge in officially opening the committee investigation into the order, which had jolted the Army and Navy. He said the committee had run into difficulty in getting testimony from high defense officials. He threatened to subpoena them, if necessary.

His statement was directed specifically at McNamara, Air Force Secretary Eugene M. Zuckert and Dr. Herbert F. York, director of Defense Department research and engineering.

Brooks said the order had ramifications for civilian as well as military space work. In this connection, Deputy Roswell L. Gilpatric told the committee the military had no intention of trying to take over the civilian space agency. He said it had enough problems of its own.

Under McNamara's follow-

up reorganization to the defense Secretary Robert S. McNamara Friday announced a sweeping Air Force reorganization designed to carry forward a March 6 directive giving the Air Force nearly all responsibility for military space programs.

Gen. Thomas D. White, air force chief of staff, said the Army Engineers shakeup was "not necessarily" in response to recent Congressional charges of incompetence and waste in connection with the missile base program.

The engineers section will be under Brig. Gen. A. C. Welling of the engineers, but he will report through the Air Force command.

Management

In any case, Air Force Secretary Zuckert said the reorganization would "improve management and carry forward the Defense Department directive which last week assigned virtually all responsibility for military space programs to the air force."

Under the reorganization, the Air Materiel Command, headed by Gen. Samuel E. Anderson with headquarters at Dayton, Ohio, will lose \$3.2 billion in new budget funds originally scheduled for it. It also will lose about 14,000 of its 165,000 personnel.

A new independent "Office of Aerospace Research" was carved out of Schriever's former command. The Air Force said this office would be engaged chiefly in basic rather than applied research.

Members of the House Space Committee raised the question of reported Army and Navy objections to McNamara's order handing the Air Force all but complete responsibility for military space projects.

*Lincoln
Atlas*

OMAHA DISTRICT
LINCOLN JOURNAL, LINCOLN, NEBRASKA
3 April 1961

Lincoln Missile Squadron Operational—On Paper

The 551st Strategic Missile Squadron at Lincoln Air Force Base became operational "on paper" over the weekend.

An administrative order has been published officially activating the Atlas missile squadron which will eventually operate the 12 missile sites in the Lincoln complex.

Currently, the squadron consists of about 10 officers and 10 airmen, commanded

by Col. Edward P. Denton. It will eventually have about 1,000 men.

The primary duty of the missilemen until the missiles arrive is assuming administrative, supply and accounting functions.

A pre-training program will be set up to prepare the missilemen for the Atlas missile training to be conducted at Sheppard AFB, Texas.

An Air Base spokesman

said the squadron will not be considered completely operational until the missiles arrive and are in place.

Airbase officials indicated that there are personnel on the base now working in other capacities, similar to missile work, who will transfer to the 551st as the final date draws near.

It was reported that the completion date has not been set.



Col. Edward P. Denton, new missile squadron commander.

"JOURNAL '18 Apr 61
**Locations
Of Missile
Sites Hit**

*Placed Upwind
Of Large Cities*

Washington (AP) — An Arizona scientist says that placing ICBM launching sites upwind of at least 9 major cities means nearly certain death for an additional 3 or 4 million Americans if the United States is attacked.

The scientist, Dr. J. E. McDonald of the University of Arizona's Institute of Atmospheric Physics, said the launching sites are certain to be "targets of the heaviest nuclear attack in the opening minutes of any sneak attack

..."
In a paper prepared for a joint meeting of the American Meteorological Society and the American Geophysical Union, McDonald said the situation presents horrendous civil defense hazards and makes "the issue one that must be given the most high level scrutiny at once."

McDonald said the following cities would unnecessarily be faced with potentially lethal fallout from enemy nuclear bombs in case of attack because of their location in respect to intercontinental ballistic missile launching sites:

Omaha, Neb.; Los Angeles; Topeka, Kan.; Kansas City; Memphis, Tenn.; Spokane, Wash.; Tucson, Ariz.; Wichita, Kan., and Little Rock, Ark. (The Omaha area has 3 missile sites. The Lincoln area has 12 sites. All are for Atlas missiles.)

"Within the past 18 months," he said, "construction has been started on most of the launching sites for the Air Force Atlas and Titan ICBM forces. In general, ICBM squadrons are being deployed near existing SAC (Strategic Air Command) bases for economy reasons. Unfortunately, the choice of SAC bases, and still more the choice of individual launcher sites at these bases, appears to have been made with almost no consideration of civil defense hazards involved."

Work Loss At Bases Is Cited

C of C Says Lincoln Missile Base Lag

By Bess Jenkins

The U.S. Chamber of Commerce's claim Monday of excessive man-day losses at Lincoln's 12 Atlas missile sites resulted in two local developments:

—Announcement that Tecumseh, one of 12 sites in the silo-type missile weapon system, should be complete and turned over to the Army Engineers for final inspection by May 1. Sites at Brainard, Eagle and Wilber should follow in subsequent week-to-10-day periods.

—Army Engineers and Western Contracting Co. officials generally agree with the U.S. Chamber's claim of 1,298 man-lost days between July, 1960 and late February of this year.

The Army Engineers put the total at 1,300 and said another 293 man-days have been lost since Feb. 28.

Western Contracting's project manager, Mason Travis, said loss of 1,788 man-days from July, 1960, to March 23 are shown on their records.

Employment total now is about 1,000 after a peak of 2,000 about 3 months ago, he explained.

He praised international unions' cooperation in eliminating work-day losses since their agreement in February with President Kennedy's 4 point program on missile construction.

The U.S. Chamber's figure on Lincoln was cited in Washington with other missile base construction as the national group strived to block union attempts to loosen Taft-Hartley restrictions on work stoppages.

Lincoln's missile project was rated 4th in number of missile bases with the most lost work-days by the chamber.

It was noted Offutt lost only 281 man-days in the same July, 1960-Feb., 1961 period. (All construction was completed and electronic installation

Atlas Work "Star" 18 Apr 61 Stoppages Are Told

U.S. CHAMBER GIVES REPORT

Lincoln area Atlas missile base work had more work stoppages than any of the other 20 intercontinental missile bases in the nation, the U.S. Chamber of Commerce reported Monday.

The Chamber said in a statement released in Washington that organized labor averaged one work stoppage every two days during the 8 months ended last February at the 21 bases.

30 Stoppages

The Chamber breakdown showed Lincoln had 30 work stoppages and 1,298 man days lost. The Cocoa, Fla., base had the greatest number of man-days lost—8,057 in 24 stoppages.

The Chamber statement said 153 work stoppages occurred at the 21 bases during the 8-month period, causing the loss of about 23,400 man-days of work. It was released as a House labor subcommittee prepared to begin hearings Tuesday on a bill to legalize secondary boycott work stoppages in the building trades.

Site Finished

Meanwhile, in Lincoln, the contractor for the Atlas installations reported the site at Tecumseh should be complete and turned over to Army Engineers for final inspection by May 1.

Sites at Brainard, Eagle and Wilber should follow in a period of about a week to 10 days.

Mason Travis, project manager for the Western Contracting Corp., which is building the silo-type missile weapon system, said the 12 sites in the system are about 92% completed as to construction. This does not, however, cover intricate electronic installation.

Employment total now is about 1,000 after a peak of 2,000 about 3 months ago.

"JOURNAL" 16 Apr 61 Engineers Will Let Contracts

Omaha—Contracts for 6 new jobs totaling nearly half a million dollars will be let by the Corps of Engineers Omaha district.

Included are two Lincoln area projects.

Bids will be opened May 3 for safety platforms in 12 missile launching silos in the Lincoln Atlas complex. A May 11 bid opening date was set for a 3-bay maintenance shop at the Army Reserve Training Command at Lincoln.

was being completed at Offutt during this time.)

Travis disclosed that the 12 missile sites in the Lincoln system are about 92% completed constructionwise. This does not cover intricate electronic installation to be done by Convair under Air Force ballistic missile supervision.

"Ten of the launch control centers in the 12 silo sites have been accepted by the Army Engineers as complete, except with some minor deficiencies," Travis said.

As Western's work phases out this summer, Convair's job will pick up tempo for the year or longer installation job needed to make the missiles operational.

'Lincoln's Atlas Job Halts Worst'

Atlas bases in the Lincoln area have had more work stoppages than any of the other 20 intercontinental missile bases in the nation, the United States Chamber of Commerce said Tuesday.

The Chamber, in a statement released in Washington, said there was an average of one work stoppage every two days during the eight months ending in February for the 21 bases.

OMAHA DISTRICT
WORLD HERALD, OMAHA, NEBRASKA
18 April 1961

Tecumseh Missile Site Nearly Done

Lincoln (AP)—The Atlas missile site at Tecumseh should be complete and be turned over to Army Engineers for final inspection by May 1, it was reported here Monday.

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Employment total now is about one thousand after a peak of two thousand about three months ago.

1,743 Man-Days
"JOURNAL" 26 Apr 61
Lost in Strikes

... at LAFB

Washington (AP) — The Defense Dept. reports Lincoln Air Force Base has had 33 strikes since April 1960 and Offutt Air Force Base 36 since March 1959.

The Lincoln strikes resulted in 1,743 man-days lost and the Offutt strikes a loss of 6,643 man-days.

The figures were part of a summary placed in evidence in the Senate investigations subcommittee's hearings on work stoppages at missile bases.

The two Nebraska bases are operational sites of Atlas missile complexes.

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LOST DURING 33
STRIKES AT LAFB

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"JOURNAL" 2 May 61
Action Against
Missile Site
Strikes Asked

Washington (AP)—Atty. Gen. Robert Kennedy has been asked by Sen. Carl Curtis, R-Neb., to take "appropriate action" in labor situations at missile sites which may involve restraint of trade and fraud against the government.

Curtis said his views, expressed in a letter to Kennedy, were based on testimony before the Senate investigating subcommittee last week dealing with strikes and work stoppages at missile sites.

Curtis told a reporter he wrote Kennedy that witnesses had said that 87,000 man days had been lost in work stoppages at Cape Canaveral.

Curtis said the civil rights division of the Justice Department should have its attention called to Florida's right-to-work law. Men are being denied the right to work at Cape Canaveral, he said, unless they belong to unions or join unions.

Some Atlas Workers Earned \$400 Weekly *Big Pay Checks Not Uncommon At Lincoln Area Missile Sites*

By Ron Gibson

Weekly pay checks of \$400 were not uncommon for skilled workers employed at Lincoln-area Atlas ICBM sites in 1960 and early 1961, a contractor spokesman said Thursday.

Mason Travis, project manager of Western Contracting Corp. which is the prime building contractor for 12 Atlas sites in the Lincoln complex, said high wage checks were paid when Western was on an accelerated schedule in 1960 and the first month of 1961.

These factors added up to fat checks for some Lincoln area workers:

Healthy wage rates under union scale contracts; for example, \$3.55 an hour for carpenters in the Omaha local. Some of the Lincoln area sites were covered under Omaha rates.

Overtime, some of which is paid at rates of time-and-a-half, and some of which is double time. Travis said some skilled workers put in 60-hour weeks, with everything over 40 hours paid at a higher rate.

The "concurrency concept" of construction required in missile-base building. This means, basically, keeping on schedule regardless of strikes, weather delays or design changes. Stoppages of this sort result in more overtime to keep the job on schedule.

Picks Up Tab

Western Contracting has to pick up the tab for any extra expense, Travis said.

Some missile-complex jobs are paid for by the federal government on a cost-plus-fee basis, which means the federal government pays any higher wage costs.

Western contracted to build the sites for a fixed fee, however, and the government cost

or two 8-hour shifts each day, depending on the stage of construction.

Higher of Two

Travis said Western's wage rates are based on the higher of two rates—either the U.S. Dept. of Labor minimum or the wage specified by a union agreement.

A Western spokesman said that in all cases where both

More on Page 2

rates apply, the union rate is highest.

Wage rates vary at the 12 sites because different locals are involved.

Up to \$3.70

For instance, carpenters covered by the Omaha rate get \$3.55 an hour now. The rate goes to \$3.70 on May 31. The Lincoln rate is \$3.40, and the Grand Island or Beatrice rate is \$3.15. Some sites are covered by these locals.

Laborers are covered under either the Lincoln or Omaha rates of an agreement with Laborers Local 1140 of Lincoln and Omaha.

Wage rates are \$2.30 an hour for Lincoln and \$2.62½ an hour for Omaha, but negotiations are under way for a new contract which would call for a retroactive increase, a Western spokesman said.

remains the same regardless of any increased costs encountered by the contractor.

Phasing Out

Western's share of the missile-building job is past the half-way mark now and the contractor is phasing out. Employment is down to about 1,200, Travis said, from a peak of 2,000.

The contractor has cut from a 7-day work week to 6 days. Some sites have cut from a 24-hour day (3 shifts) to one

"STAR" 2 May 1961

Lincoln Construction Strike Hinges On Tuesday Meeting

A strike by Lincoln area laborers and trades union members hinges on a Tuesday meeting of the Building Trades Council, it was reported Monday.

Negotiations between representatives of 9 trades unions and the Associated General Contractors representatives were broken off Monday with the two sides "as far apart as ever" according to the contractors' spokesmen.

Union representatives were unavailable for comment.

Leonard Schaefer, business manager for Laborers Local 1140, had said earlier that if Monday parleys were not successful, a strike would be called Tuesday, tying up the major portion of Lincoln area construction.

The 9 unions have been working without contracts since March 31. A separate agreement was signed with Western Contracting Corp., building the Atlas missile sites, and with several smaller contractors not members of the AGC.

President of the Lincoln AGC, John Miller, said that Monday's session with the union representatives recessed in mid-afternoon after union officials made a counter-proposal to their demands for a hiring hall which the management officials termed "quite unreasonable."

Union representatives asked

in an alternate proposal for an immediate 20c hourly wage hike and another increase of 17½c next year, Miller said.

Melvin C. Goings, president of the Lincoln Building and Construction Trades Council, verified that the council would discuss the subject at a Tuesday meeting, but declined to discuss the possibility of a trike.

A representative of the Federal Mediation and Conciliation Service attended the Monday bargaining sessions.

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MCCLELLAN CLAIMS—

Striking At Missile Bases Is Blackmail

Washington (UPI) — Sen. John L. McClellan, D-Ark., Thursday denounced labor work stoppages at U.S. missile bases as "gouging," "sandbagging" and "blackmail." He called them a "sordid kind of extortion."

McClellan, chairman of the Senate investigations subcommittee which investigated the situation, called on Congress to pass a law outlawing deliberate work stoppages on vital government contracts. Unless it acts, he said, the lawmakers may be a party to the nation's destruction.

McClellan made the charges in a statement winding up his committee's inquiry and then elaborated in a Senate speech. He blamed unions, management and military overseers for the "intolerable" situation.

Not Necessary

Work stoppages could have been halted, he said, if top labor leaders had placed local unions in trusteeships and disciplined union business agents who did not persuade their men to stay on the job.

He also criticized some tool rental companies, who, according to testimony, charged rentals as high as 500% of the original cost of the equipment.

The Arkansas Democrat said some unions and workers "may well be responsible to a substantial degree for whatever gap or lagging behind exists in our space and missile programs."

Deliberate

He cited disclosures of "wildcat strikes, work stoppages, slowdowns, featherbedding and a deliberate policy of low productivity" which have been made during the two weeks of hearings.

McClellan added that there has been evidence that some missile base subcontractors "tolerated, acquiesced in and encouraged" slowdowns and

profited from them.

In scolding the military services, the senator said their attitude has been "far too passive and ineffective."

Two other subcommittee members, Sens. Karl E. Mundt, R-S.D., and Carl T. Curtis, R-Neb., joined McClellan in criticizing the work stoppages. Both expressed doubt that administrative actions can end the abuses.

Common Situs

Curtis said testimony shows that some of the wildcat strikes at Cape Canaveral were strikes of a type which would be legalized under the so-called common situs picketing bill. He suggested that Goldberg, if he is sincere in his desire to stop the missile delays, withdraw the administration's support for the common situs bill.

Like McClellan, Curtis said some of the blame for the work stoppages must go to the "silence and inaction" of government officials on the missile sites.

McClellan said he was suspending the hearings while the Kennedy administration undertakes action on the situation. Labor Secretary Arthur J. Goldberg will begin a series of meetings Monday to prepare recommendations for President Kennedy. McClellan said he would cooperate in such efforts.

Probe Of Missile Industry Labor Asked By Martin

Washington (AP) — Rep. David Martin, (R-Neb), Wednesday called for the House to investigate costly labor trouble in the missile industry. He said Congressmen ought to consider remedial legislation if necessary.

The Senate Investigations subcommittee suspended hearings on the problem pending a promised move from the administration aimed at assuring labor peace at the bases.

"STAR" 17 May 61
**\$56,000 Contract
Given For Atlas
Safety Platforms**

Omaha — A \$56,989 contract for construction and installation of safety platforms at each of the 12 Lincoln Atlas missile sites has been awarded to Denver Steel & Iron Works of Denver, Colo.

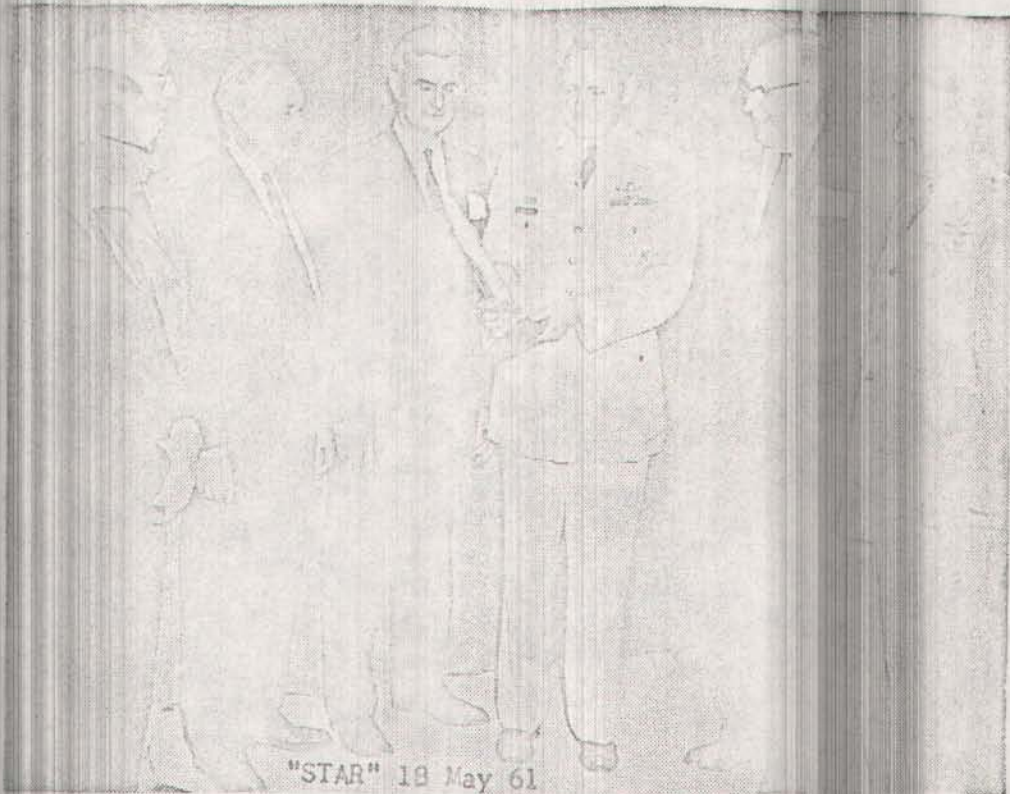
The announcement of the contract letting to the division of Idaho-Maryland Industries, Inc., came from Omaha District Engineer Col. H. G. Woodbury, Jr.

Denver Steel submitted the lowest of 9 bids received by Army Engineers for the job. The government's estimate was \$97,050. Provided for are the manufacture and delivery of 12 hydraulically operated steel platforms by the end of November.

Bids will be opened by Army Engineers June 14 for construction of a fuel catchment tank system for the Atlas sites.

The project is estimated to be in the \$200,000 range, Woodbury said. It must be completed by next November.

The project includes a 15,000 gallon underground steel fuel tank with 90 feet of stainless pipe, two valves and wiring.



MAYORS EYE MISSILE MODEL

Five mayors of Lincoln area towns with nearby Atlas sites examine a model of the intercontinental ballistic missile held by 98th Bombardment Wing's acting commander, Col. William C. Garland. From left to right are Mayors Pat Boyles of Lincoln, O. N. Miller of York, Phillip Nestor of Tecumseh, Woodrow Dvorak of Brainard, Garland, Fred Marquardt of Avoca

and Lincoln Air Force Base commander Col. William H. Working. The mayors attended a Wednesday luncheon at LAFB's officers club as part of Armed Forces Week celebrations and witnessed military ceremonies for A/1c Robert L. Palmer. He received a Freedom Foundation award for his contest-winning letter, "My Vote: Freedom's Privilege." (Star Photo)

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"STAR" 22 May 61

Atlas Not Completely Reliable, Says Zuckert

Washington (UPI) — Air Force Secretary Eugene Zuckert said Sunday Russia has "significantly more" intercontinental ballistic missiles than the United States.

He also said the United States could not count on the reliability of its Atlas ICBM at this time. But, he said America's combination of missiles and manned bombers make it the most powerful nation in the world.

Questioned in a TV interview, Zuckert declined to state how many Atlas missiles this country had on launching pads. He said this was a military secret.

He also declined to use the term "missile gap" in saying Russia had more ICBM's than the United States.

"That is not the whole story," he said. "There is much more to the story.

In this connection, he said

the United States would rely on manned bombers as a bulwark of its defense "for a good many years to come." He said this country must maintain a versatile defense rather than "going to extreme" of sole reliance on missiles.

In discussing the reliability of the Atlas, Zuckert said that like any new weapon, the 5,000-mile missile was not completely reliable.

But he said it would become more trustworthy as time went by.

Zuckert was asked whether Russia had the power now to wipe out the United States with a sneak nuclear attack. He said:

"If you don't get a warning and if you don't have the deterrent, then you are in a position where your potential enemy could wipe you out."

"STAR" 27 May 61

Atlas Scores On Long Trip

Cape Canaveral, Fla. (AP) — The Air Force launched an Atlas missile 5,000 miles Friday night, racking up a second straight success for a new, more powerful model of the intercontinental range rocket.

Officials reported the big missile performed as planned in streaking to a bullseye near the south Atlantic island of Ascension.

Atlas Silo, 15 Stories' Down, Awesome to Legislative Guests

By Dean Terrill
Southeast Nebraska Bureau
Nebraska City — "She'd hold a lot more hay if they hadn't dumped so much junk in first."

That remark is a bit naive to be expressed by any state senator, but visiting a concrete Atlas silo will at least trigger the thought, sure as shootin'.

A legislative delegation toured the massive underground structure here Wednesday.

A preview of the \$1.5 million Atlas missile launching site, one of 12 in southeast Nebraska finging 175 feet into the earth, suggested the lawmakers may be even more dazzled by its complexity than its size.

Dug beyond the depth of a 15-story building, the buried installation is a vertical jungle of stainless steel piping, wrist-thick electrical cables and giant oval tanks. Its 60-foot diameter is so crammed with mysterious mechanisms, huge and yet intricate, that they will wholly envelop the intercontinental missile itself in its 20-foot shaft.

Pipe-Fitter's Dream

"This is the pipe-fitter's dream you've always heard of," joked Ken F. Lauritsen of Omaha, site engineer for the U.S. Corps of Engineers. "It's stacked into 8 servicing levels, each one a little more of a maze than the others."

The missile bases are being constructed by Western Contracting Corp. with from 100 to 200 workers at each job site most of the time.

Most of the tubular network — varying from tiny copper lines to 10-inch rocket-loading connections — is part of the vast propellant system for fueling the missile. Nine main tanks and an assortment of smaller ones contain such fuel components as helium, nitrogen and liquid oxygen.

An oversize air conditioning system adds to the complicated ductwork, feeding directly into electrical control cabinets to cool and dry the myriads of transistors. Air also will be circulated through the entire pit to prevent asphyxiation of personnel, Lauritsen said.

8 Giant Springs

Even the enormity of the silo is surpassed by some of



Top to bottom . . . Atlas missile launching site, silo 175 feet into the ground.

its unique features; for example, the fact that only the concrete outer shell is anchored to the ground. Everything else — more than 1,000 tons of bolted and welded metal — is suspended from 8 giant steel springs some 60 feet high.

"Every piece of metal on the site is grounded, to guard against static electricity that might come even from a few footsteps," explained Frank Fontaine of Lincoln, electrical foreman.

To protect fittings from the shock of a blast-off, a flexible connection runs to each pipe bolted to the stationary outer wall. Even the fluorescent lights — like everything else powered by two 750-horsepower generators — are mounted on springs.

"Usually we think of the Atlas as being a one-shot op-

eration, but actually a second missile could be loaded in comparatively short time," Lauritsen noted.

Once the installation is completed its only access will be through an underground control center connected to the silo by a 40-foot tunnel. A two-story cavern, the center's upper level, will house the half-dozen or so personnel on duty.

The control center also is suspended, and will contain the multiplicity of electrical panels to be installed later by Convair. This unit is protected by a concrete roof 4 feet thick, buried beneath 9 feet of dirt.

Guide rails and counterweights for the rocket are already in, but the missile platform itself will be installed later. Huge hinged doors will protect the pit, but will be

designed to swing open when the Atlas is in firing position.

From the standpoint of construction progress, the Nebraska City unit is about midway compared with the other 11 sites. The Tecumseh base is nearest completion.

Testing is to begin soon on the Nebraska City pressure-loading system, which is completely installed. A personnel elevator also is finished, but cannot be used until the electrical system is operative.

According to Lauritsen, what the state senators see now is indeed "farm silo simple" compared with what comes later.

"After the construction phase is finished, Convair takes over," he remarked. "I understand that's when things start getting technical."

Complex Atlas Silo Dazzles Legislators

By Dean Terrill

Southeast Nebraska Bureau
Nebraska City — A legislative delegation touring the concrete Atlas silo near here Wednesday appeared dazzled more by the complexity of the underground structure than by its size.

The lawmakers were given a preview of the \$1.5 million Atlas missile launching site, one of 12 in southeast Nebraska fingering 175 feet into the earth.

Dug beyond the depth of a 15-story building, the buried installation is a vertical jungle of stainless steel piping, wrist-thick electrical cables and giant oval tanks. Its 60-foot diameter is so crammed with mysterious mechanisms, huge and yet intricate, that they will wholly envelop the intercontinental missile itself in its 20-foot shaft.

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Nebraska News

cated ductwork, feeding directly into electrical control cabinets to cool and dry the myriads of transistors. Air also will be circulated through the entire pit to prevent asphyxiation of personnel, Lauritsen said.

Once the installation is completed its only access will be through an underground control center connected to the silo by a 40-foot tunnel. A two-story cavern, the center's upper level, will house the half-dozen or so personnel on duty.

REACH PEACE PLAN FOR MISSILE BASES

... Firm No-Strike And No-Lockout Pledges

Washington (AP)—The government came up Friday with a labor peace plan for missile and space bases and officials said they are sure it will work.

The plan involves a firm no-strike pledge from labor unions and a no-lockout pledge from manufacturers and contractors — along with a new 11-man "Missile Sites Labor Commission" designated to settle all disputes.

President Kennedy expressed confidence to Secretary of Labor Arthur J. Goldberg, who arranged the new peace plan, that it will enable fast and economical completion of the nation's multibillion dollar space projects.

New Importance

The arrangement is all the more important since Kennedy has just asked Congress to chart an accelerated program for sending a man to the moon.

Goldberg agreed at a news conference there is nothing in the law, nor in an executive order issued by the President establishing the new commission, to compel disputants to abide by the new group's decisions.

The labor secretary said, "this nation placed a man in space before the eyes of the world. Now we have shown that free labor and management can respond to the responsibility of observing the national interest without the compulsion of law."

Simkin Co-Chairman

Goldberg will head the missiles-space labor peace commission, with William E. Simkin, director of the Federal Mediation and Conciliation Service, serving as co-chairman.

Three top representatives each from the public, labor unions and management round out the commission. The public is represented by labor experts David L. Cole, David H. Stowe and John T. Dunlop.

The union men are AFL-

CIO President George Meany, Walter Reuther, head of the AFL-CIO industrial union department, and C. J. Haggerty, president of the AFL-CIO building and construction trades department.

Representing management are Edgar F. Kaiser, president of Kaiser Industries, Inc., Douglas Dorman, vice president of Martin Aircraft, and James D. Marshall, executive director of the Associated General Contractors of America.

"OMAHA WORLD HERALD"
Martin finds
June 1961
'Inefficiency'

Waste Also 'Raised Missile Base Cost'

Representative Dave Martin said Thursday his four-day investigation of missile base construction in this area disclosed glaring inefficiency and waste.

"Extra costs from labor malpractices and some subcontractors neither properly equipped or knowledgeable of their jobs have forced the Government to spend millions of extra dollars," he said.

He said there have been 20 strikes at the Mead base with 6,362 days lost at a cost of \$237,500.

At Lincoln Air Force Base 1,808 man-days were lost, he said. Cost figures were not available.

At Warren Air Force Base near Cheyenne, Wyo., strikes cost 23,073 man days and 580 thousand dollars, he said.

'Went Broke'

The Kearney, Neb., Congressman said one Mead subcontractor operated a steakhouse before obtaining a two-million-dollar contract.

"I believe he went broke," Mr. Martin added.

He said the Malan-Grove Construction Company, which received about 13 million dollars worth of missile work, had its obligations assumed by a bonding company. He noted Malan-Grove now has a claim of \$4,500,000 against the Government.

Mr. Martin said electrical workers at Mead and Lincoln on the 8 a. m. to 6:30 p. m. shift received regular time while those working between 4:30 p. m. and 8 a. m. got time-and-a-half. He said this will be changed.

Lease-Rent Hit

He said that between April, 1960, and March, 1961, at Mead 48 extra workers were hired to watch automatic gas boilers and air-conditioners. He said this practice has ceased.

Mr. Martin criticized provisions for the lease-rental of

equipment to the Government at missile sites. He said the cost is too high and that better bookkeeping is needed.

The Congressman said he will recommend amending the Davis-Bacon Act to prevent jurisdictional disputes between craft and industrial unions which result in waste at missile sites.

Mr. Martin noted that work stoppages are fewer now than during the periods criticized and that efficiency has increased.

Laborers Offer Package Plan To Contractors

NO AGREEMENT REACHED IN LENGTHY SESSION

By Tom Perry

Laborers' Local 1140 offered the Associated General Contractors a "package proposal" Monday night.

The AGC negotiating committee considered the package for several hours, but the bargaining session broke up early Tuesday with no agreement reached, according to AGC Secretary Dean Kratz.

AGC President John Miller issued a brief statement after the session broke up early Tuesday which left the issue of a union hiring hall still in doubt.

Miller said:

"We made another offer which included an immediate wage increase of 17½ cents and some condition changes. They rejected this offer and are still insisting on the hiring hall clause."

Earlier in the session, Schaefer appeared to have dropped his proposals concerning the hiring hall. They came up again in the later negotiations.

Leonard Schaefer of Omaha, business manager for the union, proposed to settle the construction strike which has paralyzed building in Lincoln since May 2 for the following:

- a 15c raise as soon as his men go back to work;
- a 12½c raise on April 1, 1962, and a 2½c raise August 1, 1962;
- a 7½c health-and-welfare program;
- a 12½c raise for work done in counties contiguous to Lancaster County, and a rate of \$2.00 per hour for those counties outside that area;

of any hiring hall issues, Schaefer then dropped his proposals for any change in the wording covering the hiring hall.

Schaefer said early Tuesday that the AGC had also agreed to a 7½ cents health and welfare clause, effective April 1, 1962.

—an agreement that prime contractors must enforce the union pay scales and working conditions to which they are committed with any subcontractors they employ;

—a list of the contractors for which the AGC is the bargaining agent.

Hiring Hall

Missing from these demands is any mention of a hiring hall, an issue that has been prominent in previous negotiations. The issue is confused because a union hiring hall already exists and is used by most Lincoln contractors, the chief exception, according to Schaefer, being Cook Construction Co.

Contractors are not now restricted to hiring through the union. Schaefer wanted to strike from the agreement which expired March 31 a sentence which explicitly states that contractors in the AGC do not have to use the hiring hall.

The contractors rejected this proposal, and Schaefer suggested submitting the question to arbitration. When the AGC rejected arbitration

AF Gets Tecumseh Atlas Site

*First Major
Work Is Complete*

By Dean Terrill
Southeast Nebraska Bureau

Tecumseh — They came a little closer today to cocking Nebraska's big gun aimed toward Moscow.

Actually the first of such "guns" — underground Atlas complexes which will house giant nuclear missiles — was turned over to the Air Force by the U.S. Corps of Engineers. A brief ceremony attended by 3 helicopter loads of top brass marked the end of the first major phase of construction.

Started in May of last year, the Tecumseh facility will now enter the installation and checkout phase handled by General Dynamics Astronautics (formerly Convair). It will be supervised by the Lincoln Site Activation Task Force (SATAF), a branch of the Air Force Ballistic Systems Division.

Big Key

An oversized key symbolic of the milestone was presented Col. V. E. Hastings, SATAF commander, by Col. John Minahan of the Corps of Engineers.

Mason Travis, project manager for Western Contracting Corp. explained that the remaining 11 sites will be transferred at intervals of approximately one week. The original schedule called for completion of construction by Aug. 1, but this probably will be missed by a month.

"The Air Force ordered over 100 major changes in the sites after work started," Travis noted. "But we have recaptured most of the time lost and are meeting the revised schedule."

Martin Asks "START" 9 June 1961 Strike Ban At Missile Bases

Washington 7—Rep. Dave Martin, (D-Nebr), citing a series of incidents at Nebraska and Wyoming missile bases, Thursday called on Congress to ban all strikes, work stoppages and slowdowns at defense installations.

Martin, a member of the House Labor Committee, told the House his conclusions were reached after a personal inquiry in these two states which first was approved and then rejected by Chairman Adam Clayton Powell, (D-NY).

Martin said Powell authorized him on May 25 to conduct such an inquiry at Offutt and Lincoln Air Force bases in Nebraska and Warren AFB in Wyoming. He said Powell wired him the next day withdrawing the authority in view of President Kennedy's action in setting up an 11-man commission to resolve disputes at missile sites.

Despite this action, Martin said, he continued the investigation at his own expense and found a number of malpractices in the construction of these 3 missile bases.

"JOURNAL", 12, Jun 61 \$1 Million LAFB Atlas Area Done

By Marvin Hatcher

Another missile countdown has been made at Lincoln Air Force Base with the completion of a \$1-million Atlas missile maintenance area.

The area consists of a specially-designed maintenance building and an addition to the base supply building.

Lt. Col. Frederick Marsh, chief of missile maintenance, said the building will house the specialist maintenance shops, maintenance control room, and administration offices.

Marsh, said the specially-designed, 165 foot by 225 1/2 foot building will normally hold one Atlas during maintenance checkout, however two will be worked on at the same time when the missiles first arrive in the Lincoln area.

The first Atlas inter-continental ballistic missile is scheduled to arrive in the early fall, according to the colonel.

The maintenance building is the second major missile building to be erected at the airbase.

A liquid oxygen (LOX) plant was finished in February, costing about \$1 million.

The LAFB plant manufactures about 200 tons (about 5,000 gallons) of LOX daily for the 12 missile bases which circle Lincoln.

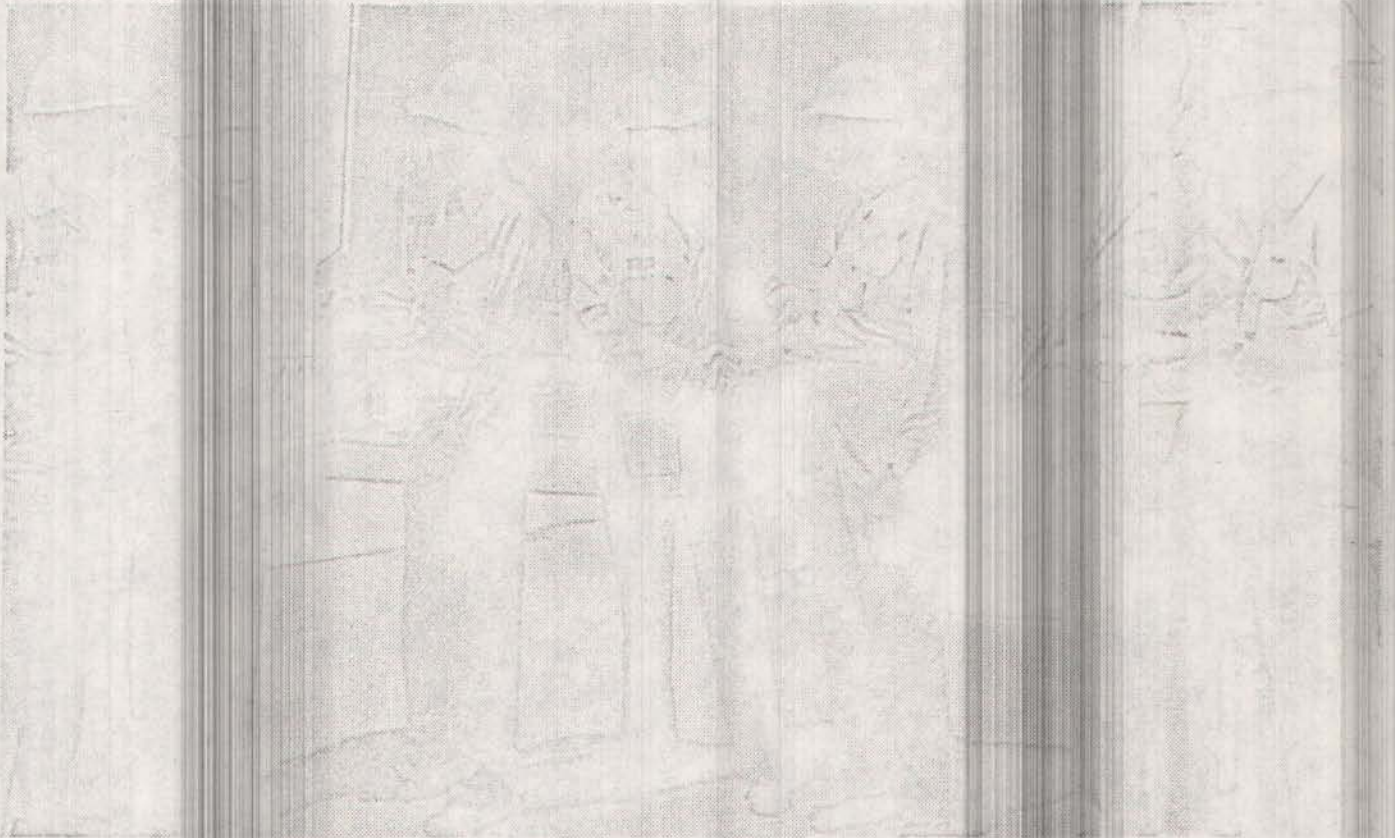
It also produces liquid nitrogen, used for freezing and drying, and breathing oxygen for the air base high flying aircrews.

First Stage of Missile Complex Is Completed

An informal ceremony Friday morning four miles north of Tecumseh, Neb., celebrated the first stage of the construction of one of the 12 silos of the Lincoln Air Force Base Atlas missile complex. The basic construction work on the 130-foot-deep nest of steel and concrete which will house an intercontinental missile has been completed. The silo extends eight

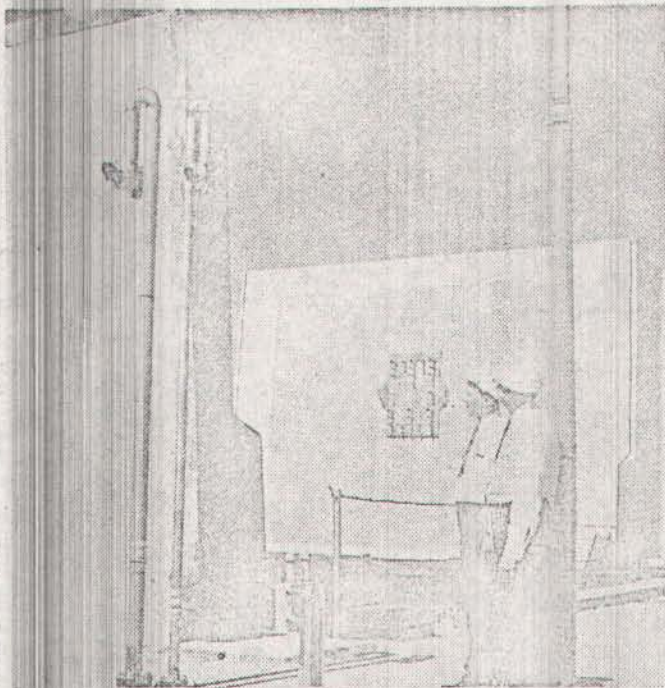
stories beneath the earth. Each of the eight stories contains tanks and piping of the missile propellant system. Taking part in the ceremony were Col. Edward P. Denton, commander of the 551st Strategic Missile Squadron; Mason Travis, project engineer for the Western Contracting Company; Col. John A. Minahan, Lincoln

area engineer for the Corps of Engineers; Lieut. Col. Joe Disana, commander of Lincoln AFB; Col. Vernon L. Hastings, commander of the Lincoln Site Activation Task Force; B. T. Boon, launch complex supervisor for General Dynamics, and Capt. C. C. Perkins, chief of Site Complex Group B.



At ceremony . . . (From left) Denton, Travis, Minahan, Disana, Hastings, Boon and Perkins.

OMAHA DISTRICT
LINCOLN STAR, LINCOLN, NEBRASKA
10 June 1961



Two massive doors shown in upright position soon will shelter a nuclear-warhead Atlas missile in its underground silo near Tecumseh. Dwarfed by the 142 tons of concrete and steel are Tecumseh Mayor Philip Nestor and Ambrose Claus, safety technician for General Dynamics Astronautics. (Star Staff Photo)

Tecumseh Missile Complex Turned Over To Air Force

By Dean Terrill
Southeast Nebraska Bureau
Tecumseh—The end of the first major phase of construction on the underground Atlas complex was marked here Friday.

In a brief ceremony attended by 3 helicopter loads of top brass, the first of 12 such complexes housing giant nuclear missiles was turned over to the Air Force by the U.S. Corps of Engineers.

Construction started on the Tecumseh facility in May, but the facility will not enter the installation and checkout phase handled by General Dynamics Astronautics (formerly Convair).

It will be supervised by the Lincoln Site Activation Task Force (SATAF), a branch of

The original schedule called for completion of construction by Aug. 1, but this probably will be missed by a month.

"The Air Force ordered over 11 major changes in the sites after work started," Travis said, "but we have recaptured most of the time lost and are meeting the revised schedule."

Among those attending the ceremonies were Lt. Col. Joe V. Disana, acting LAFB commander; Col. Edward P. Denton, commander 551st Strategic Missile Squadron; Earl B. Newton, operations manager for General Dynamics Astronautics; Mayor Philip Nestor of Tecumseh; and Cliff Bolin, president of the Tecumseh Chamber of Commerce.

the Air Force Ballistic Systems Division.

As a symbol of the milestone reached, an oversized key was presented Col. V. L. Hastings, SATAF commander, by Col. John Minahan of the Corps of Engineers.

The remaining 11 sites of the 12-missile complex will be transferred at intervals of approximately one a week, according to Mason Travis, project manager for Western Construction Corp.

Contract To Malan Firm Under Attack

By The Associated Press

A Nebraska congressman declared Friday a firm which did a "lousy job" building vital missile bases in Nebraska has been awarded a \$14 million Veterans Administration contract in Cleveland.

This charge came from Rep. Glenn Cunningham, R-Neb.

Cunningham said the Malan Construction Company of New York City was primarily responsible for delays in construction of Atlas missile bases near Omaha in 1959 and 1960, yet the Veterans Administration gave this firm a \$14,740,000 contract May 26 to build an 800-bed hospital in Cleveland.

The Nebraskan said the Corps of Engineers rejected the original Malan company bid for construction of the Nebraska missile bases because "the firm lacked an adequate capability." After another New York Construction company was brought in as a partner on the project, and after a reported meeting at the Pentagon between Congressmen from New York and military officials, Cunningham said, the military officials awarded the contract to Malan, the low bidder.

Story below. First stage of Tecumseh Atlas site completed . . . Giant doors, right, cover eight-story deep missile nest. Entrance to control and personnel centers marked by arrow. —World-Herald Photo.

10 JUNE 1961. OMAHA WORLD HERALD

Basic Work Finished on Tecumseh Atlas Site

Other photos on Page 20.

By Tom Allan

World-Herald Staff Member

Tecumseh, Neb.—Completion of the first stage of construction of one of the 12 silos of the Lincoln Air Force Base Atlas missile complex was celebrated at an informal ceremony Friday morning at a site four miles north of town.

It marked the finish of the basic construction work on the 180-foot (eight stories) beneath the earth nest of steel and concrete.

It had taken a year to get this far. It will be another 12 to 14 months before the 80-foot missile is in the nest.

The ceremony marked the formal completion of work by the Western Contracting Company, 5801 E. 1st, Ia., and the

supervising Corps of Engineers.

* * *

Final Phase

General Dynamics Astronautics, under the supervision of the Lincoln Site Activation Task Force, has already begun the final phase.

Col. V. L. Hastings, commander of the Lincoln SATAF, said this phase usually takes 12 to 14 months.

Col. Hastings accepted a symbolic key to the site in the ceremony from Col. John A. Minahan, Corps of Engineers, the Lincoln area engineer for the ballistic missile construction office. Also taking part were Col. Edward Denton, commander of the 551st Strategic Missile Squadron; Mason Travis, Western Contracting's project engineer; Tecumseh's Mayor Phil Nestor and Chamber of Commerce President Cliff Boline.

There was no complaint of

the delays which have plagued other Atlas projects.

In fact, Mr. Travis said his company would finish and turn over 11 of the 12 sites in the Lincoln project "about September first."

He said his company will be finished about a month behind the original scheduled completion set for August despite "over a hundred changes" in design and engineering since construction began.

* * *

Schedule

The other silos, he said, will be completed in "intervals of approximately a week or at a rate of four or five a month."

Since construction began here eight thousand cubic yards of concrete, 946 tons of reinforcing bars and 430 tons of structural steel were

placed in the hole 180 feet deep and 52 feet in diameter.

* * *

Maze

The visitors Friday were awed by the maze of equipment already installed on the eight floors and in adjoining personnel and control centers. Included are 20 separate utility and operations systems, including diesel generating equipment, and electrical systems capable of supplying the needs of a small town.

In addition there are heating and air-conditioning systems and huge tanks and piping for the missile propellant-loading system.

And still to be added are the operational systems.

When completed, the site will contain 75 hundred mechanical, 11 hundred hydraulic and 1,375 pneumatic parts as well as 650 miles of wire and 27 thousand electrical terminals.



Sun. Star & Journal
Blast Kills
18 June 1961
Missile Man

... at Wilber Pit

Industrial Fatalities	1961	1960
Nebraska	17	4
Lancaster County ..	2	0
Lincoln	1	0

Wilber—A worker at the Atlas missile site near here was killed Friday when a safety cap on a high pressure air pipe blew off and knocked him 35 feet to the bottom of the pit.

He was Stiles Berry, 58, of Little Rock, Ark.

Officials said Berry was working on a catwalk 35 feet from the bottom of the Atlas pit 7 miles west of here when the safety cap, holding back 4,000 pounds of pressure, blew off.

Death resulted from the cap striking his body and not from the fall, officials said.

The body has been shipped to Arkansas for burial, the Zajicek Funeral Home here reported.

Project Sets Milestone

First Phase Begins Under SATAF Control

A brief ceremony took place last Friday at the Tecumseh Atlas Missile Complex marking a milestone in the vast Lincoln AFB Atlas Site construction project.

Various Air Force and civilian construction officials were at the Tecumseh Missile Complex ceremony to mark the formal turnover of the silo from Colonel John A. Minahan, Lincoln Area Engineer, Corps of Engineers, Ballistic Missile Construction Office (CEBMCO), to Colonel V. L. Hastings, Commander of the Lincoln Site Activation Task Force (SATAF), a branch of the Air Force Ballistic Systems Division, General Dynamics Astronautics, under the supervision of

the Lincoln SATAF will now begin the Installation and Check-out phase (I&C) of construction. Upon the completion of the I & C phase, the completed complex with its ready missile will be turned over to Colonel Edward P. Denton, Commander of the 551st Strategic Missile Squadron, of the 818th Air Division, SAC, Lincoln Air Force Base, Commanded by Colonel Thomas G. Corbin.

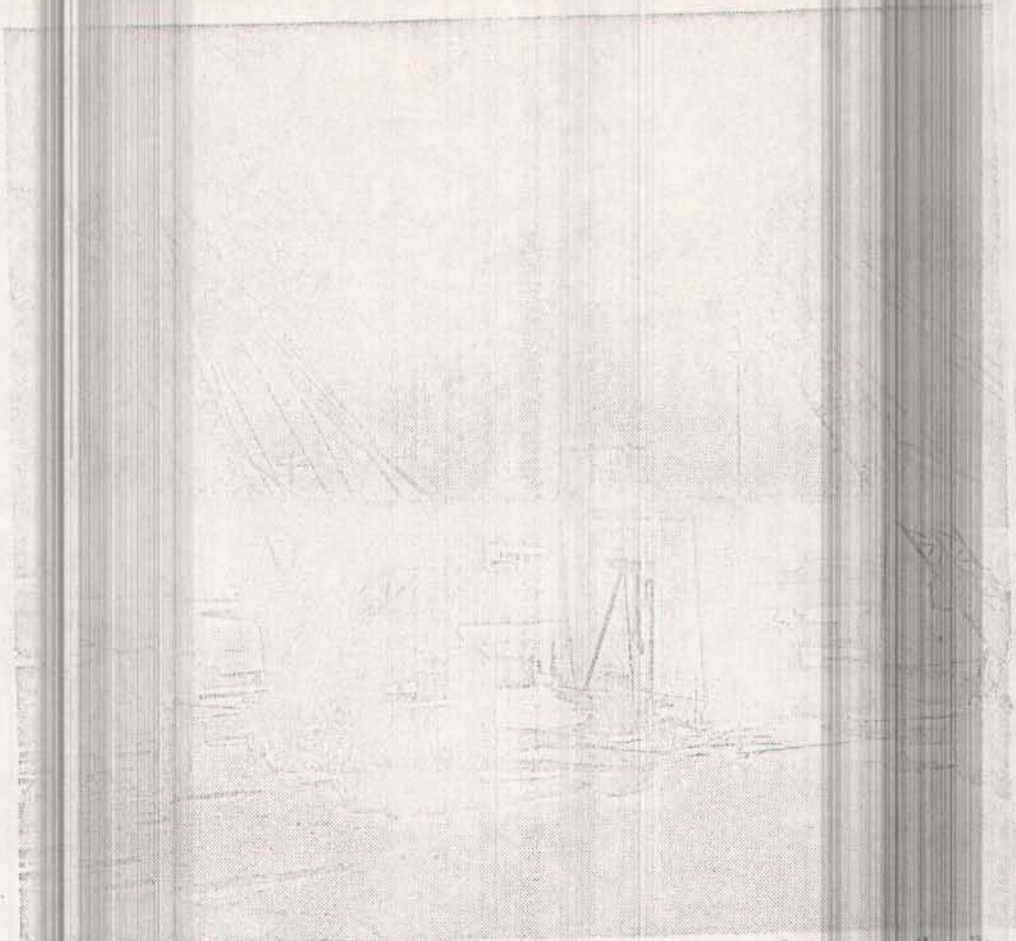
Among those attending the ceremonies were: Colonel John A. Minahan, Lincoln Area Engineer (CEBMCO); Colonel Vernon L. Hastings, SATAF Commander; Lt. Col. Joe V. Disana, Lincoln Air Force Base Commander; Colonel Edward P. Denton, Commander 551st Strategic Missile Squadron; Mr. Earl B. Newton, Operations Manager for General Dynamics Astronautics; The Honorable Philip Nester, Mayor of Tecumseh; and Mr. Cliff Boline, President of the Tecumseh Chamber of Commerce.

Here at the Tecumseh complex since May 15th of last year, Western Contracting Corporation of Sioux City, Iowa, under contract with the Corps of Engineers, Ballistic Missile Construction Office, has excavated 71,000 cubic yards of earth; placed 8,000 cubic yards of concrete, 946 tons of reinforcing bar, and 430 tons of structural steel to form a silo 174 feet deep and 52 feet in diameter.

Into this facility was installed 20 separate utility and operations systems, including diesel generating equipment and electrical systems capable of supplying the needs of a small town, heating and air conditioning equipment, and tanks and piping for the missile propellant loading system.

At the completion of the I & C phase and turnover to the Air Force for operational use, the giant Atlas ICBM silo will contain 7,500 mechanical, 1,100 hydraulic and 1,375 pneumatic parts as well as 650 miles of wire and 27,000 electrical terminals.

Between now and Autumn the remainder of the Atlas silos will be turned over to the SATAF for the I & C phase.



Heavy construction has ended at the Brainard site . . . concrete doors cover the silo.

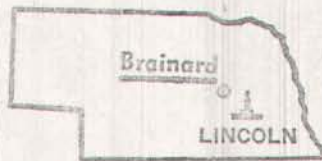
Brainard Atlas Silo Finished, Presented to Operational Force

Brainard — Another Atlas silo was accepted Monday by Col. Vernon L. Hastings, site activation task force commander (SATAF) from Colonel John A. Minahan, commander of the Lincoln area corps of engineers.

The second silo completed by Western Contracting Corp. and Corps of Engineers this month is near Brainard. The first silo completed and accepted by Col. Hastings was marked by a key turn-over ceremony near Tecumseh on June 9.

General Dynamics Astronautics, under the supervision of the Wahoo SATAF will now begin the installation and checkout phase of construction. Upon the completion of this phase, the completed Atlas complex with its

ready missile will be turned over to Colonel Edward P. Denton, Commander of the 551st Strategic Missile Squadron, of the 818th Air Division of the Strategic Air Com-



mand, commanded by Colonel Thomas G. Corbin, Lincoln Air Force Base.

During the past 11 months at this silo, Western Contracting Corporation men have excavated some 12,000 standard dumptruck loads of earth, poured about 1,333 ready-mix truckloads of concrete, installed 946 tons of steel reinforcing bar, and 430 tons of structural steel to form a silo

174 feet deep and 52 feet in diameter.

In this silo was installed 20 separate utility and operations systems, including diesel generating equipment and electrical systems capable of supply the needs of a small town, heating and air conditioning equipment, and tanks and piping for the Atlas missile propellant loading system.

At the completion of the checkout phase and turnover to the Air Force for operational use, the giant Atlas ICBM silo will contain 7,500 mechanical, 1,150 hydraulic and 1,375 pneumatic parts as well as 650 miles of wire and 27,000 electrical terminals.

Between now and autumn the remainder of the Atlas silos in the Lincoln area will be turned over to Col. Hastings.

Cunningham: "STAR" 27 June 1961 Contractors Should Work

Washington (AP)—Rep. Gen. Cunningham, R-Neb., suggested Monday that all prime contractors having federal contracts be required to do at least 35% of the actual construction work with their own forces.

Cunningham told the House he was in the process of drafting a bill to carry out this suggestion and added:

"I believe this simple requirement will provide the necessary supervision on construction projects in the future which obviously has been lacking in many projects in the past.

"I believe it is the minimum which is necessary in order to discourage — even eliminate — bid brokers from further government work."

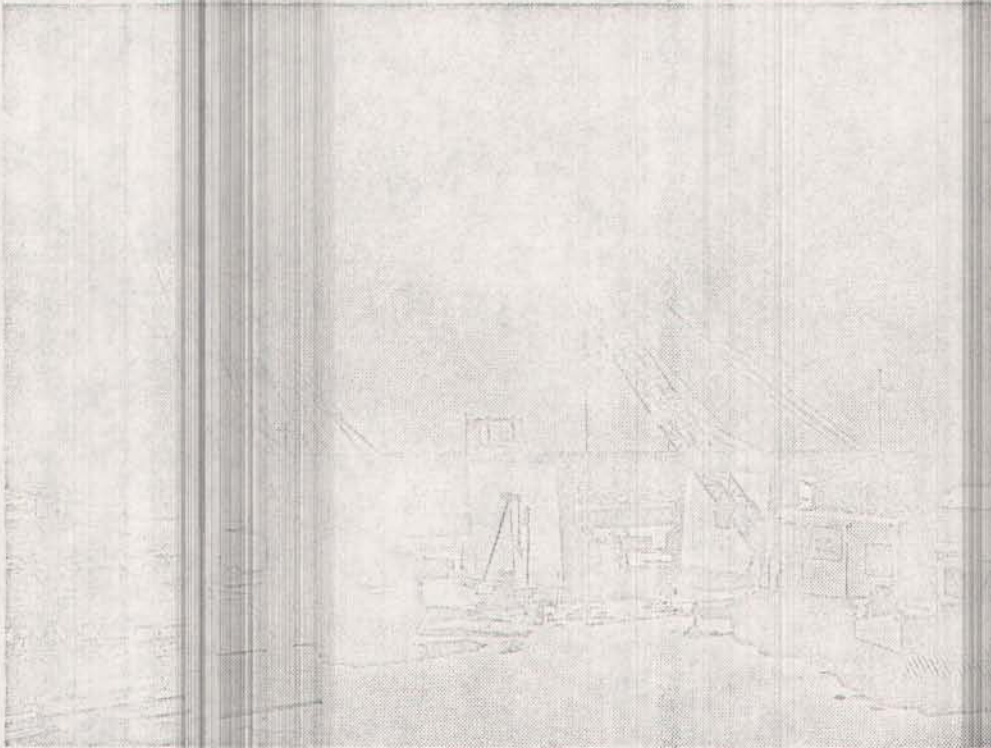
Cunningham cited the policy of certain government departments which handle a large amount of construction work to back up his contention that bid brokers or bid jobbers are a problem.

He then referred to the Malan Construction Co. of New York which was awarded a \$12,870,000 contract for work on missile sites near Offutt Air Force Base as "a bid broker or bid jobber."

He said the firm joined with another New York construction firm — Grove, Shepherd, Wilson and Krueger — to form a combine known as Malan-Grove for work in Nebraska.

The firm, he said, has compiled a poor record in the Nebraska area which has resulted in filing of a number of law suits against Malan.

Bid brokers in general make every possible attempt to submit the low bid on projects and, if then awarded the contract, begin to shop around for subcontractors, Cunningham said.



HEAVY CONSTRUCTION WORK FINISHED

Heavy construction has been completed and the installation and checkout phase begun at the Atlas

missile site near Brainard. Upon completion of this phase, the missile complex

will be under the command of Col. Edward P. Denton at Lincoln Air Force Base.

Atlas Electronics Work Means 2,600 New Jobs ... Payroll Will Be \$1.7 Million Monthly

By Bess Jenkins

Lincoln is the hub of the southeastern Nebraska area just weeks away from an economic windfall—a new monthly \$1,750,000 income.

This represents the payroll of some 2,600 workers which General Dynamics-Astronautics must employ to install the electronics components for

the Lincoln Atlas missile system.

Childress to Speak

The economic impact of this \$21 million annual income will be reviewed for the Chamber of Commerce's Lincoln Area Industrial Development Committee at a July 10 luncheon meeting at the Cornhusker.

Speaker will be Frederick J.

Childress, communication administrator of General Dynamics-Astronautics.

Childress held this post as General Dynamics equipped the Ofutt missile sites. He is remaining at the Mead headquarters for the repeat assignment on the Lincoln complex.

The 2,600 employees will represent a peak employment in late September of General Dynamics and its subcontractors.

The payroll will go up as Western Contracting Corp.'s employe total declines. Western, constructing the underground missile sites, is turning these over to the Army Engineers Corps as they are completed.

General Dynamics and its sub-contractors then begin their work.

Almost Completed

Mason Travis, Western project manager, Atlas sites at Tecumseh, Brainard and Eagle have been completed. The Wilber site is scheduled for completion July 7, Nebraska City, July 14 and the others at one week intervals. They include Avoca, Beatrice, Cortland, Elmwood, Palmyra, Seward and York.

"We expect to be through by the end of August," Travis said.

He said Western already has spent in excess of \$10 million on worker salaries. It will take at least another \$3 million in paychecks to complete the job. Western's peak employment was about 2,000.

It is understood electronic specialists will be recruited elsewhere by General Dynamics for the job ahead. This was true for the Ofutt electronics work, since none are available in Nebraska.

Many of the non-technical jobs will be filled by Nebraskans. Some of these already have applied to General Dynamics.

Housing Question

Employees will work at all of the 12 sites, plus headquarters of the missile squadron at Lincoln Air Force Base and the field office supply headquarters at Mead.

It is expected many will live in nearby towns but others may commute from Lincoln.

The question of housing is one to come up at the July 10 Chamber of Commerce meeting.

The Lincoln missile complex, started in May, 1960, is scheduled for a fall, 1962, occupancy by the Strategic Air Command.

Sunday Journal and Star



Capital
News Section
Lincoln Nebraska
Entertainment TV-Radio

Missiles Bringing \$20 Million Payroll

Installation Takes 18 Months, Affects 16 Counties Economically

It will cost from \$20 to \$21 million in payroll dollars to make the Lincoln Atlas Intercontinental Ballistic Missile system in southern Nebraska operational.

This payroll will affect all or parts of 16 southeastern Nebraska counties, according to Fred J. Childress, communications administrator for General Dynamics Astronautics Co. of San Diego.

"It covers a 1,800 square mile area," he said.

Col. Vernon L. Hastings of the SATAF Command at Wahoo estimates, based on experience of earlier Atlas in the Omaha area, that between 300 and 400 residents of Lincoln will be employed in Atlas civilian work. The balance of around 600 will be from Omaha, Wahoo, Fremont, and towns near missile sites.

The missile sites around which the work will be centered are Avoca, Beatrice, Brainard, Cortland, Eagle, Elmwood, Nebraska City, Pal

myra, Seward, Tecumseh, Wilber and York.

Childress said the estimated \$20-\$21 million total payroll would cover all employment needed for the missile electronics work from last winter through summer, 1962—target date for completion.

If a severe winter should delay the electronics installation schedule, Childress said, the total wage output could climb beyond \$20-\$21 million.

In his outline of the economic impact of this program Childress said it will be reflected over most or part of 16 different counties, including Lincoln-Lancaster. The system has 12 dispersed missile sites.

Peak Employment

He said a peak of 2,600 employees for General Dynamics and associated-sub contractors will be reached this winter for just a few months. Monthly payroll for this period will be about \$1,750,000.

General Dynamics will have a mean average of 500 employees during the entire 18-month period. The total mean average for all contractors on the job will be 1,000 during those 18 months, Childress reported.

He explained Mead-Wahoo, the Air Force Site Activation Task Force Command (SATAF) headed by Col. Vernon Hastings, will be the hub of the work program. About 400 to 500 civilian employees will be working there until the Lincoln missile system is turned over to the Strategic Air Command.

He estimated Lincoln Air Force Base, headquarters for the new missile squadron, will have a steady employment of about 125 civilians until the complex is checked out for turnover.

Housing for about 40% of the employees will be no problem, Childress said. They will be local workers already established in homes.

Associate contractors with General Dynamics are General Electric, responsible for the nosecone, and International Telephone and Telegraph-Kellogg Division, electrical communications.

Subcontractors

Major subcontractors include Rocketdyne Division, North American Aviation of Los Angeles, responsible for the missile engines; Ferguson-Smith of Salt Lake City, mechanical work, and RCA and Bosc.-Arma of Farmingdale, Long Island, electrical work.

OMAHA DISTRICT
LINCOLN STAR, LINCOLN, NEBRASKA
12 July 1961

Atlas System Brings \$26 Million Payroll

A payroll of between \$20 and \$26 million brought in by the installation of the Lincoln Atlas Intercontinental Ballistic Missile system will affect all or parts of 16 counties in southeastern Nebraska.

Frederick J. Childress, communications administrator for General Dynamics Astronautics Co. of San Diego, Calif., in speaking before a luncheon of the Lincoln Area Industrial Development group, pointed out that the payroll will affect an 1,800 square mile area.

Childress said the estimated payroll will cover all employment needed for the missile electronics work from last winter through the summer of 1962.

A peak of 2,600 employes for General Dynamics and

associated sub-contractors will be reached this winter for just a few months, Childress estimated.

He said monthly payrolls will amount to about \$1,750,000.

Col. Vernon L. Hastings of the SATAF Command at Wahoo estimated that between 300 and 400 Lincolnites will be employed in Atlas civilian work. About 600 others will come largely from Fremont, Omaha and Wahoo.

Childress said that the Air Force Activation Task Force Command at Mead-Wahoo, headed by Col. Hastings, will be the center of the work program.

Some 400 to 500 civilian employes will be working there until the Lincoln missile system is taken over by the Strategic Air Command, he said.

He estimated that the Lincoln Air Force Base, headquarters for the new missile squadron, will maintain an employment of some 125 civilians until the complex is completely ready for SAC.

He pointed out that housing would be no problem since some 40% of them will be local workers.

Missile Site Labor Picture Shows Sharp Improvement

"STAR" 17 July 1961

Hyannis Port, Mass. (AP)—President Kennedy got a report Sunday that work stoppages from labor disputes at the nation's missile sites dropped sharply in June compared with last year.

Secretary of Labor Arthur J. Goldberg, chairman of the Missile Sites Labor Commission set up by Kennedy May 26, said man days of work lost in June equaled only a little over one per cent of the time lost a year earlier.

Goldberg said the commission has obtained no-strike and no-lockout pledges from both labor and management.

"I think this record is concrete testimony of the desire of labor and management to cooperate in making sure that work on our missiles and space programs goes forward uninterrupted," Goldberg wrote the President.

He said during 1960 a total of 86,000 man days of work were lost because of strikes at missile and space sites. That's an average of over 7,000 man days a month. In June, 1960, 26,217 man days were lost in work stoppages. He explained the high June total was due chiefly to the fact that June is contract renegotiation month.

Last month, when contracts again were renegotiated, only 312 man days of work were lost, Goldberg said.

Goldberg reported that labor relations committees have been set up at the 21 missile sites under commission jurisdiction.

He said the committees have dealt with a large number of labor problems, including those of work jurisdiction and assignment, grievances, non-union employees, and alleged uneconomic work practices.

The secretary said the committees "have been outstand-

ingly successful in preventing work stoppages".

He reported that international unions have been "extremely cooperative."

Goldberg told Kennedy his commission has been making continuing studies on "uneconomic practices," and is holding hearings now at Topeka Air Force Base, Kan., and Vandenburg Air Force Base, Calif.

He also said that the commission expects to give a decision soon on a "difficult jurisdictional dispute" between the International Brotherhood of Electrical Workers and the International Union of Operating Engineers involving cable laying at missile sites.

Area Defense Control Center Nears Completion in Sioux City

LINCOLN JOURNAL
23 JULY 1961

Sioux City, Ia.—A \$35 million, 3-story, windowless stone building is near completion at Sioux City Air Base.

The building will house the nerve center for one of the Midwest's Air Defense Sectors. Semi-automatic Ground Environment (SAGE), a system that can dispatch a guided missile or manned fighters towards an oncoming enemy.

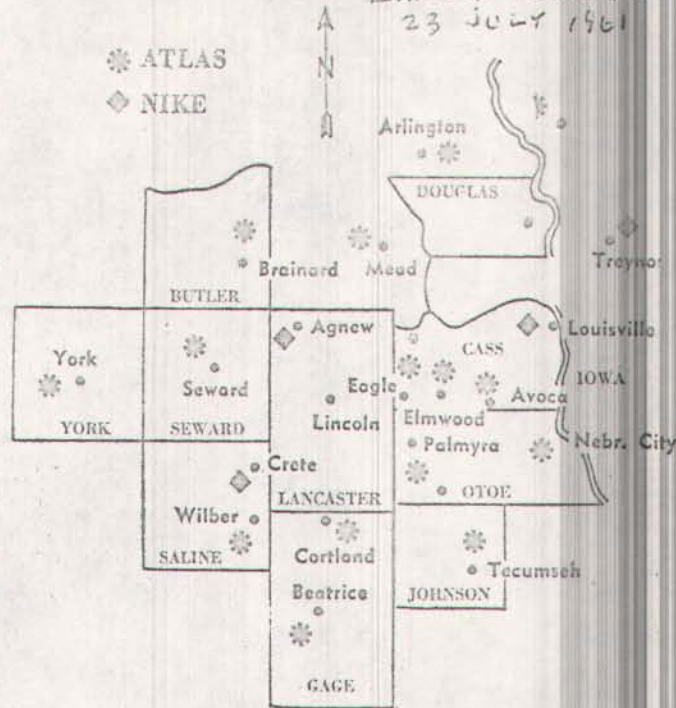
The Sioux City Air Defense Sector Direction Center is the last of 21 SAGE Sectors to be constructed, all under the North American Air Defense Command (NORAD) at Colorado Springs, Colo.

Each Has Area

Each Sector is responsible for protecting a certain geographic area by air surveillance, calculating the course and speed of enemy planes in seconds and dispatching guided missiles or manned interceptors.

The present Sioux City sector includes major portions of Iowa, Nebraska, Kansas and Missouri and lesser parts of Oklahoma and South Dakota.

When the Sector goes operational late this year, it will control all air defense wea-



Atlas and Nike sites in Lincoln-Omaha area.

bomber and aerodynamic missile, the SAGE system of air defense for the continental United States will be complete when the Sioux City Sector becomes operational.

Giant Computers

Then the giant IBM computers at the Sioux City SAGE Direction Center will start digesting thousands of bits of Air defense information provided each second by the radar "eyes" of the Sector.

Eight Air Defense divisions in the United States and Greenland make up the system in North America.

Units under the new Sioux City SAGE system will include active Air Force fighter aircraft, Air National Guard fighters, Army Nike missiles, and radar stations for relaying information.

A Sioux City Air Base spokesman said the Air National Guard's mission under the Air Force Air Defense Command (ADC) will change from standby status to an active NORAD unit if an attack occurs.

Computers Connected

The Nike-Hercules site computers will be connected electronically to the giant computer at Sioux City.

A combined staff of Army and Air Force officers will feed necessary data into the computer "brain" and fire the missile.

ing units on the base for the incoming personnel.

The only major construction is the large, 3-story, monolithic stone building.

The Sioux City Air Defense Sector is a unit of the 29th Air Division (SAGE) at Richards-Gebaur Air Force Base, near Kansas City, Mo.

Other SAGE sectors under the 29th Air Division command are located at Minot AFB, and Grand Forks, N.D., and Great Falls, Mont.

Nike-Hercules sites in the Lincoln-Omaha area are at Crete, Agnew and Louisville, Nebr., and Treynor, Ia.

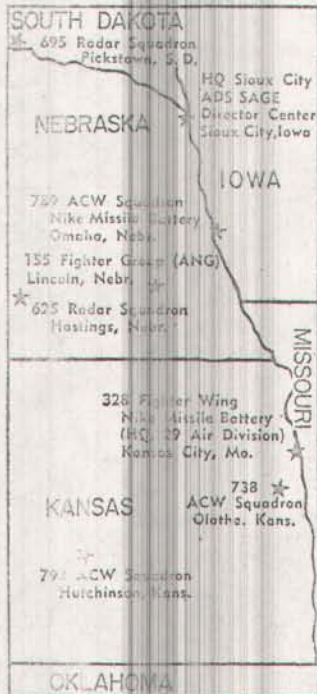
Primary Targets

Primary targets to be defended against a possible manned bomber attack in the Sector's 120,000 square miles include major installations and population centers at Omaha, Hastings, and Lincoln, Nebr.; Wichita, Salina and Topeka, Kan.; Kansas City, Mo., and Sioux City.

Atlas intercontinental ballistic missile complexes are also located within the Sector's area of responsibility, but are not controlled by SAGE.

There are 12 Atlas sites in the Lincoln area and 3 in the Omaha complex.

Designed to provide a highly technical defense against the threat of the manned



Sioux City Air Defense Sector.

pon systems in the Sector area, including Army Air Defense Command Nike-Hercules ground-to-air missile batteries near Lincoln

trois.

The air base spokesman said existing facilities and the strategic location were the major factors for the base being selected for the SAGE Direction Center.

In April, 1960, a fighter group was deactivated, leaving facilities and equipment at the base.

A small "housekeeping unit" remained to take care of the base.

The spokesman said that nearly 1,000 personnel will be in the new organization, including 235 civilians.

There are about 300 Capehart and sub-standard hous-

Action Set On Missile

Site Waste

"SUN. JOURNAL & STAR"

23 July 1961

Commission Will

Check Contracts

Washington (UPI) — A federal watchdog commission said Saturday it will crack down on wasteful practices or overtime pay abuses by unions at the nation's missile bases.

The 11-man Missile Sites Labor Commission announced in a policy statement that it was going to check contracts covering bases construction work to try and end "unreasonable" provisions.

Labor Secretary Arthur J. Goldberg, head of the commission, decided to tackle the unprecedented task of policing labor-management agreements after reporting early success in halting strikes at the missile-space installations.

The action is designed to halt or modify some of the labor-management practices disclosed by the Senate Investigations Committee headed by John L. McClellan (D-Ark).

Testimony indicated that some craftsmen received up to \$300 a week because of contract clauses that awarded them as much as 4 times their normal pay.

The commission said that since many construction contracts are now being negotiated it wanted to set down guidelines for the employes and government agencies involved.

"Wage rates, fringe benefits and other conditions of employment should not be negotiated which establish more costly standards on missile and space site construction than are made applicable to other construction activity in similar circumstances," Goldberg said.

Missile Accident Is Fatal

One Dies, Diver Saves Others

York (AP)— One man died in the nitrogen-filled shaft of an Atlas Missile site near York Tuesday and two fellow workmen (both having Lincoln addresses) were overcome as they went to his aid, but a 4th workman donned skin-diving equipment and saved them.

H. L. Rochelle, site superintendent for Western Contracting Co., said the accident occurred when a gasket failed on a high pressure line being tested, filling the shaft with nitrogen.

He identified the victim as Harold B. Odle, 26, Wichita, Kan., an employe of the Paul Hardeman Co., a sub-contractor on the project.

Robert Hartsoe, about 31, of Chase City, Va., and 2141 So. 36th, Lincoln, and Warren Miller, 28, of South Hill, Va., and 2910 Starr, Lincoln, fell about 47 feet when they were overcome as they went to Odle's aid.

Miller was listed in critical condition at the York Hospital late Tuesday and Hartsoe, also hospitalized there, was listed as fair. A hospital official said the extent of their injuries had not been determined.

Down Below

Mr. Odle, working as the foreman, was in a lower part of the silo known as the "fill and vent," according to W. F. Travis, project manager for Western in Lincoln.

Travis said pressurization tests were being conducted on high pressure nitrogen gas lines, a part of the propellant loading system.

While the gas is not poisonous, it is under pressure and a leak in the line may limit the supply of oxygen in the immediate area, Travis said.

Rochelle said when nitrogen filled the bottom of the 67-foot shaft, causing Odle to be overcome, Hartsoe took an emergency air tank and started down after him, but was soon overcome and fell to the bottom of the shaft.

Miller then tried to go down but he, too, was overcome and fell.

Then Jerry May, 27, of Central City, a hobby skin diver, donned air tanks, went down into the shaft and passed lines around the 3 men so they could be raised to the surface. He was uninjured.

Rochelle said that had it not been for May's act, Hartsoe and Miller might have died.

—'DIVER' RESCUES MEN—

"STAR" 26 July 61

Missile Site Accident

Kills One; Two Saved

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Silo 'Dive' Saves Two Workers

26 July 61

Gas Kills One At Atlas Site

Industrial Fatalities 1961	1960
Nebraska	20 8
Lancaster County	2 1
Lincoln	2 1

York—A hobby, coupled with courage, is credited with saving the lives of two missile workers following an accident that took one life.

Killed was Harold B. Odle, 28, of Wichita, Kan., an employe of the Paul Hardeman Co. Overcome by gas and saved by Jerry May, 27, of Central City were Robert Hartsoe, 31, and Warren Miller, 28, both natives of Virginia who reside in Lincoln while working on a missile site near York.

May, whose hobby of skin diving keyed the rescue, was not injured.

Witnesses gave this account of the accident:

A gasket blew out on a high pressure line filling a shaft with nitrogen at the Atlas missile silo.

Odle was in the lower part of the 67-foot shaft and overcome by fumes. Hartsoe took an emergency air tank and started down to assist Odle. He was overcome and fell to the bottom of the shaft. Miller followed, but he, too, was overcome and fell.

Then May, using skin diving techniques, donned air tanks, entered the shaft and passed lines around the 3 men. They were raised from the shaft by a crane.

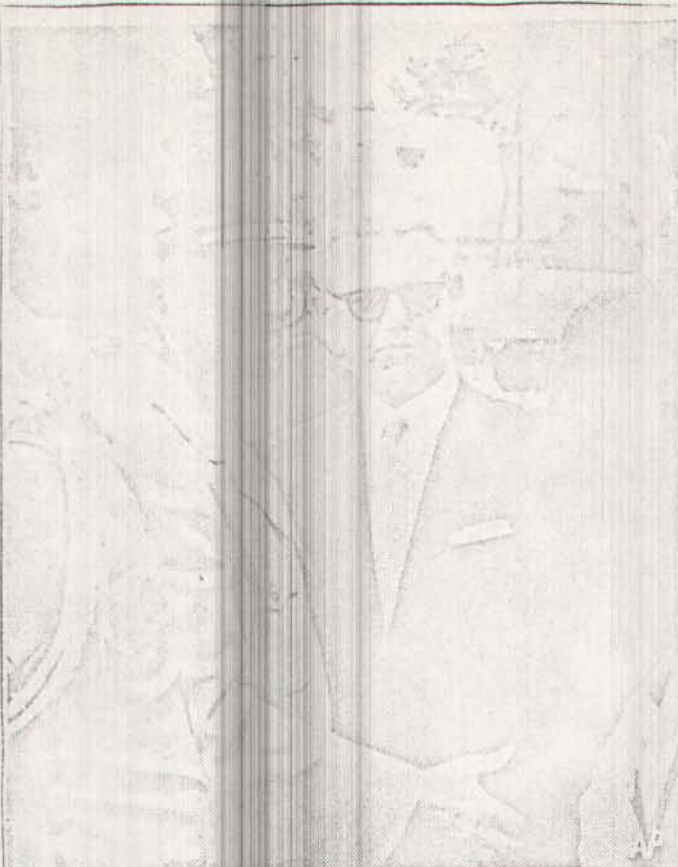
H. L. Rochelle, site superintendent for Western Contracting Co., said that had it not been for May's action, Hartsoe and Miller might have died in the shaft.

Odle died shortly after being brought out.

Miller remains in critical condition at a York hospital. Hartsoe is in good condition.

Miller's Lincoln residence is 2910 Starr; Hartsoe's is 2141 So. 36th.

^{"STAR" 1 Aug 61}
**Missile Site Workers
Get No-Strike Warning**



^{"Star" 1 Aug 61} WIREPHOTO

GOLDBERG VISITS SAC

Labor Secretary Arthur Goldberg performs introductions for Gen. Thomas S. Power as the SAC chief welcomes Goldberg and his inspection party to headquarters at Omaha. Standing rigidly at attention at left is a member of the SAC Elite Guard. (See story, Page 11)

Omaha (AP) — Secretary of Labor Arthur J. Goldberg said Monday if the voluntary no-strike, no-lockout pledged at missile and space bases fails "the president will have no hesitancy in going to Congress if necessary."

"This is a test we are making," he said. "We expect everyone involved to do his job and keep this no-strike pledge voluntarily."

"There is no reason or justification for any worker walking off the job," he said, since the formation the missile sites labor commission, providing machinery for resolving problems which may arise in missile base construction.

Goldberg and members of the commission arrived in Omaha for a short tour of Strategic Air Command headquarters. From Omaha they left for Vandenberg Air Force Base in California.

Meets Committee

Goldberg met briefly with the Lincoln and Offutt missile site labor relations committee, headed by E. H. Ries, Omaha, representative of the U.S. mediation and labor conciliation service in this area.

Goldberg told this committee that "the right to strike is a right we want to preserve," but he said the "world situation is such that we cannot tolerate the normal degree of differences that we have in construction and programming and administration."

"One of the things that is worse than a strike is the loss of freedom," he said.

He reminded the committee that President Kennedy did not go to Congress for restrictive legislation, but went to unions and management asking them "voluntarily to pledge that there would be no strikes and no lockouts and uninterrupted production in the missile and space program."

"We are hopeful that you (the local committees) can

bring to them (the workers) the sense of urgency that the president has given me."

Ries replied that "we will do everything in our power to see that there is not one hour lost, let alone . . . one day."

Power Stern

Goldberg and his party ran into some stern words Monday at SAC headquarters.

Gen. Thomas S. Power, SAC commander, told the visitors some of the past missile base labor stoppages "didn't make too much sense."

Gen. Power estimated that missile delays were due to 70% technical shortcomings and 30% labor stoppages. But he said pointedly that the labor troubles could have been avoided.

Gen. Power, at a briefing made it clear, however, that SAC is confident it is ready to counter effectively any enemy attack.

Earlier Monday at Cape Canaveral Goldberg reported vast improvement in preserving labor-management peace at the nation's missile and space sites.

Goldberg promised a monthly report to President Kennedy and the nation on how the recent no-strike, no lock-out pledge governing missile-space base labor relations, is working out.

"In a very real sense, our problem is much graver than it was in World War II," the labor secretary told a meeting with the local labor-management disputes committee.

1 Aug 61



WIREPHOTO

GOLDBERG AT SAC—Labor Secretary Arthur Goldberg performs introductions for Gen. Thomas Power as the SAC chief welcomed Goldberg and his inspection party to Offutt Air Force Base.

Missile Workers Given No-Strike Warning

"JOURNAL" 1 Aug 61

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**Buy's Kerr Title
Firm Of Omaha**
STAR 2 Aug 61

Fidelity Title Insurance Co. President William E. Grubbs of Lincoln announced Thursday that his firm has bought the 54-year-old Kerr Title Guarantee and Abstract Co. of Omaha.

Purchase of Kerr's capital stock was completed Thursday for an undisclosed sum.

Grubbs, former state insurance director who formed Fidelity Title in January, said the Omaha branch office of the Lincoln firm would be moved from its present location in the Keeline Building to the Omaha National Bank Building.

Mrs. Margaret A. Dwyer, who has managed the Kerr firm for the past 25 years, will continue to manage the abstract department in the Omaha branch, and Jack Leonard will manage the title insurance department at Omaha, Grubbs said.

A former Nebraskan, Leonard has been associated with one of the nation's largest title insurance companies at Sacramento, Calif.

**Lincoln Firm Low
On Title Contract**
STAR 2 Aug 61

Fidelity Title Insurance Co. of Lincoln was the apparent low bidder Thursday for a federal contract to obtain title evidence and issue title insurance policies on 75 parcels of real property in connection with missile sites.

The Corps of Engineers is handling the contract for the missile sites which will be located in 8 Nebraska counties: Cass, Gage, Otoe, Butler, Johnson, Lancaster, Saline and York.

Strike Total Lowest Since World War II

STAR 2 Aug 61
Washington (AP) — Secretary of Labor Arthur J. Goldberg reported to President Kennedy Thursday the first 6 months of the year saw "the greatest period of industrial peace since the end of World War II."

Goldberg reported that only one-tenth of 1% of working time of all non-farm workers

was lost because of strikes during the period.

His report showed 6,720,000 man-days lost due to strike idleness during the January-June period this year, compared with 10,900,000 in 1960, and 32,700,000 in 1952.

The number of workers involved in strikes was also at

a postwar low. For the 6-month period the total was 609,000, compared with 740,000 in the same period of 1960, and 2,310,000 in 1952.

The half-year total of numbers of strikes at 1,810 was the lowest such postwar figure except for the 1,589 strikes in 1953.

Missile Site Labor Losses Hit New Low

STAR 3 Aug 61
Washington (UPI) — Labor Secretary Arthur J. Goldberg reported Wednesday after a two-day tour of key missile bases that man-days lost to strikes at the launching sites fell to an all-time low of 209 in July.

Goldberg praised contractors and workers for their record of uninterrupted performance. "Work is being performed with great expedition and great dedication," he told a news conference.

More than 1 million man-days of work were recorded last month.

Goldberg made his trip as chairman of the Missile Sites, Labor Commission. This group was set up to end delay and wasteful practices after disclosure of abuses by a senate investigations subcommittee headed by Sen. John L. McClellan, D-Ark.

The labor secretary said many problems remain to be solved. He said the complex missile program raises many jurisdictional problems between unions. Housing is in short supply for workers, and some workers are demanding travel pay because they have to drive up to 90 miles to reach some isolated bases, he said.

Corps Of Engineers Buys Property Rights

STAR 8 Aug 61
The Army Corps of Engineers will acquire some rights to 75 parcels of land in 9 Nebraska counties, according to L. Y. Lawton of the real estate division of the Corps.

The properties are adjacent to missile sites and will be posted and patrolled for safety sake, Lawton said.

New Atlas Passes First Flight Test

... MODEL 'F' WILL FILL LINCOLN AREA SILOS

Cape Canaveral, Canaveral, Fla. (AP)—A new model Atlas missile, designed for storage in hardened underground silos successfully passed its first flight test Tuesday, striking a target 5,000 miles away.

Twelve of the underground launching silos are being constructed in the Lincoln area.

"STAR" 9 Aug 61

Other silo facilities are being constructed near Salina, Kan.; Altus, Okla.; Abilene, Tex.; Roswell, N. Mex.; and Plattsburgh, N.Y.

The air force reported that all test objectives were met as the blockbuster rocket sped down the Atlantic range at peak speed of more than 15,000 miles per hour. The nose cone impacted as planned near the south Atlantic island of Ascension.

This was the first flight for the Atlas "F." It is similar to the "E" Atlas being tested concurrently with the major differences aimed at storing a fueled rocket for long periods in the protected silos.

General Dynamic-Astronomic, which makes the missile, said the changes include: 1. addition of special fuel valves to permit long term storage. 2. a draining device to remove impurities which accumulate at the bottom of the fuel tank. 3. addition of more tank pressuriza-

tion helium storage spheres to permit a shortened countdown. 4. minor electrical alterations.

The "E" rockets will be stationed above ground. The "F" will be placed in the protected holes which are being built to survive all but a direct hit by a nuclear bomb.

The silos are 17½ feet deep and are capped with steel and concrete doors which open rapidly at the time of launch. The "F" Atlas elevates to the surface before firing. A kerosene-base fuel remains in the rocket at all times. Liquid oxygen is pumped in when a decision to launch is made.

Awesome Underground Silo Hides The Atlas

By Betty Person
Impressive — bewildering — complex — awesome — frightening—a whale of a hole.

That's a U.S. Air Force Atlas Missile Site.

A layman marvels at the stupendous undertaking of just plain building a missile site, and is overwhelmed in trying to imagine the mil-



Betty

lions of details which had to be worked out before the first spadeful of earth could be turned.

The massive doors which will close over the hole when the mighty Atlas is in place are monuments to engineering skill in themselves.

Each (there are two) weighs 70 tons—that's equal to piling up about 35 average size cars on each slab of concrete which is nearly 3 feet thick. Yet the doors themselves, and the mechanisms governing them, are scaled to millionths of an inch—balanced so deli-

cately that not a hitch can occur if they are pressed into service.

You begin your descent through a concrete stair-

EDITOR'S NOTE: Lincoln Star reporter Betty Person went into the depths of an Atlas missile silo near Palmyra. Here are her impressions.

way off to the side—a normal enough approach, nothing frightening about that.

At the end of the stairway you walk through a seemingly ordinary door, but

you're informed this is the "trap," and that as the site becomes more classified, a television camera placed there will assure those inside that each entrant is on "our team" in every sense of the word.

You are now in the Launch Control Center.

At the first level is the "housekeeping area" where the men who will man the missile will have their kitchen, medical supplies and sanitary facilities.

It's Safe?

You wonder if maybe you shouldn't volunteer for duty. It's quite a bomb

shelter. Not lavish in any respect — it's spare — but utilitarian, and safe in the ground.

You're informed that this circular room, part of a little silo in itself, is so constructed that the floor is suspended from 4 hydraulic air jacks to make it flexible.

You descend by stairway again to the second level—and in this circular room, a twin of its mate above, lie the "brains" of the whole operation.

Panels of lights, each labeled to describe every operational phase of this com-

plex engineering wonder, dazzle your eyes. You don't understand it, but you're impressed.

Main Feature

You're ready now to see the main attraction.

You pick your way across the floors of iron grating (and they certainly did not design them with women's high heels in mind) and there you are — on an iron grating walkway bordering a seemingly bottomless pit.

A narrow band of steel lies between you and nothingness.

You fix your eyes on the wall directly opposite, study

the pipes, the tubing, the valves, the switches, the gigantic springs — everything and anything to keep from looking down into that dim abyss.

You reach for a rivet — one small protusion from that sheet of metal so gratefully at your back — and tell the butterflies (which feel like eagles) to be quiet.

Good Workout

If one is at all inclined toward acrophobia, your senses get a thorough workout standing on that iron grating at the top level aware of the shadowy dark-

ness below.

Not until you have the moral and physical support of a couple of good, strong, male arms do you even venture to peer over the railing into the blackness below.

In a fleeting glimpse you see monstrous gray concrete walls slashed with brilliant orange networks of steel that diminish into darkness at the bottom of that enormous pit.

Steel Bench

You give up the iron grating flooring and find a

(Continued on Pg. 6)

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10 AUGUST 1961

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Atlas Silo Inspection Really Opens The Eyes

(Continued from Pg. 1)

solid piece of steel off to the side upon which you can rest while the hardier members of the party descend into the hole by a narrow, open, spiral staircase.

You watch the workmen, familiarity breeding unconcern for their situation, as they sprint up and down the stairway.

You smile, half apologetically for the sissy attitude you display, and they rejoin with another smile, saying, "We don't blame you — it's all in getting used to it."

Thanks, but you don't think you want to.

Then they bring up the elevator — so constructed that if a door at any one of the 8 levels is open even a fraction of an inch it won't operate — and you begin your descent.

Huge Tanks

You stop off at the various levels on your way down to view the wonders each holds. The huge storage tanks hold thousands of gallons of fuel which will propel the giant missile on its fantastic flight.

You remember you were warned to stay away from the nitrogen tests being conducted above ground — those vapors register 320 degrees below zero. That's too cold no matter what Nebraska's current temperature might be.

You look at the cliffs of reinforced concrete — eight thousand cubic yards of cement, enough to pave 2½ miles of high grade highway, goes into that Atlas missile silo which reaches nearly 180 feet in depth and some 50 feet in diameter. And the area around the top is covered by a 9-foot cap of reinforced concrete. That's pretty impressive too.

At The Bottom

And there you are — at the bottom of the hole. Crash helmet firmly in place, you are permitted to step into the center for just a moment (there's too much danger from falling objects, and even a small bolt picks up lots of weight

in such a descent). It's a long, long way to the top. And it's so black at the bottom.

Ascending straight to the top, you once again screw up your courage enough to take one more quick glance at where you were a moment before.

You think again of the men who have created this wonder — the Air Force scientists who devised it, the U.S. Corps of Engineers and workmen who built it, the Convair men who are fitting it out with its complex electrical units, the U.S. Air Force men who will operate it.

You think of their minds, patience, skill, daring, endurance and back-breaking labor — and you're grateful beyond words — and thankful they're on our team.

As you leave the missile site you notice a marker — just a few hundred feet down the road — which denotes that just over a hundred years ago the pioneers of another era passed this way in their covered wagons — down the Oregon Trail.

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(2)

"STAR" 11 Aug 61
\$648,750 Asked

In Two Fatal Missile Mishaps

Omaha (AP)—Damage suits totaling \$648,750 growing out of two fatal Atlas missile construction site accidents have been filed in Federal District Court.

One suit asks \$598,750 for the next of kin of Milo J. Olson, 40, Sioux City, Ia. He was killed March 6 at the missile site near Elmwood.

Olson, an ironworker foreman for Western Contracting Co., was struck on the head by a falling pipe vise.

The suit was brought by the administrator of Olson's estate on behalf of the widow, a son and a daughter.

A \$50,000 suit was brought by the parents of Delbert T. Ryan, 25, St. Peter, Minn., killed Nov. 6 when he fell 150 feet down the shaft of an Atlas launching site near Cortland. He was an ironworker employed by Salyer Re-Bar Erection, Inc., Lincoln.

12 Area Missile Sites Near Completion

By Marvin Hatcher

It takes a heap of manpower and material to make a missile go . . .

Twelve Atlas Intercontinental Ballistic Missile complexes circling Lincoln in an irregular fashion will soon have missiles poised for launching.

A casual observer might find the construction phase simple in appearance, but a closer look will reveal precision



Col. Hastings

operations, some measured at thousandths of an inch.

Construction and activation phases have put 31 different companies and about 4,500 military and civilian personnel to work at various times.

Intricate

The "ballistic sentries" of the nuclear age, are gigantic in size but minute in intricate mechanisms.

To attain this high degree of professionalism for the intercontinental ballistic missile, the United States Air Force required numerous military and civilian skills.

The Air Force, having approved of base designs by

General Dynamics, Astronautics of San Diego, Calif. (maker of the Atlas), provided the U.S. Army Corps of Engineers with plans to build the missile sites.

In the Lincoln area, the Corps of Engineers received a low bid from Western Contractors Corp of Sioux City, Ia., to excavate 12 holes — 52 feet wide and 174 feet deep — to house the missiles.

The silo is a round hole, that could hold more than 3 million bushels of shelled corn. Digging starts in an excavation area of about 150 feet by 200 feet, before the silo shaft itself is dug out.

12,000 Trucks

It takes about 12,000 standard dump trucks to haul more than 70,000 cubic yards of earth excavated from the huge hole.

The sides of the silo are of reinforced concrete, about 2 feet thick at the bottom and 9 at the top.

One thousand ready-mix truckloads of concrete are needed to pour the 6,000 cubic yards of concrete that go into the silo walls.

Within the silo, ironworkers and other tradesmen install a framework of steel beams called a crib.

The 8-sided crib is suspended inside the silo on giant steel springs designed to withstand earth tremors or bomb blasts.

The launching platform rests atop a 21-foot square steel box, which hangs on cables and is raised and lowered like an elevator in the silo. The depth of the silo is equivalent to an 8-story building.

When resting on the bottom, the missile is completely covered by two massive concrete and steel doors.

Lincoln
Journal
2 Sept 1961

Minute Missile Facts

Construction & Activation Timetable

(30 months schedule)

1-10 Months—Missile emplacement planning; Construction of missile emplacement (steel and concrete); and temporary facilities for missile ground equipment installation.

10-20 Months—Maintenance of emplacement equipment and facilities; General Dynamics/Astronautics installation and checkout; construction of missile emplacement; delivery and installation of missile ground equipment.

20-30 Months—Maintenance of emplacement equipment and facilities; subsystem checkout; intersystem checkout, proving demonstrations and United States Air Force acceptance.

Companies & Crews

	Military	Civilian
Lincoln Site Activation Task Force (SATAF)	35	75
Corps of Engineers	7	85
General Dynamics/Astronautics and subcontractors		1,671
General Electric Co.		16
International Telephone and Telegraph Co., Kellogg and subcontractors		67
Cook Electric and subcontractors		78
Air Products Co.		6
Bechtel Corp.		2
Black & Veatch		1
Western Contracting Corp. and subcontractors		2,500
Total	42	4,501

4

Control Center

The electrical power generating units in the silo generate enough power to supply the needs of a city the size of Grand Island.

Approximately 650 miles of electrical wire connected to 27,000 terminals are used in one missile complex.

More than 7,500 mechanical parts, 1,100 hydraulic parts and 1,375 pneumatic parts are required.

A launch control center, buried about 45 feet deep, 100

Cont 5

feet away from the silo, is connected by an underground tunnel to the silo launch emplacement.

Built of reinforced concrete, it also has a steel crib inside, which is held up by giant, air-cushioned shock absorbers.

This is the nerve center of the missile complex, eventually to be operated by 5 airmen.

Work was started at the site a few miles north of Tecumseh in May, 1960.

In June of this year, Tecumseh was the first to have its major phase of construction completed and the Corps of Engineers handed the project over to Lincoln Site Activation Task Force (SATAF). Headquarters of SATAF is at Mead.

Since June, construction

on 10 complexes has been completed, leaving 24 to be finished.

From the beginning, General Dynamics, Astronautics as the principal associate contractor, along with many other contractors were working with the Corps of Engineers in the base activation program.

Other major contractors include: General Electric Co. (defense systems department and missile and space vehicle department), International Telephone & Telegraph Kellogg Co. (communications), Rocketdyne Division of North American Aviation (rocket engines), and many other lesser known, but equally important.

After Western Contracting Corp. finishes the major phase of construction for the Corps of Engineers the responsibility rests on SATAF.

Col. Vernon L. Hastings, 44, SATAF commander, a native Nebraskan from Aurora, said the military and civilian technician-engineers and the construction workers have developed a combined pride in achievement since the missile program began.

Hastings said putting highly skilled military and industrial teams into the same harness probably has been the most remarkable part of the missile program during the construction and activation phases.

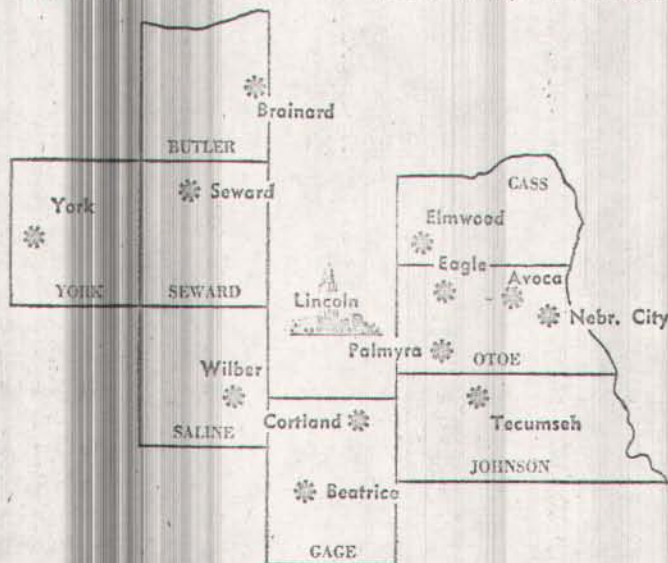
The technological complexity of the Atlas weapon system presents a vast and demanding management task which is shared by a large cross-section of military and civilian organizations.

Joint Effort

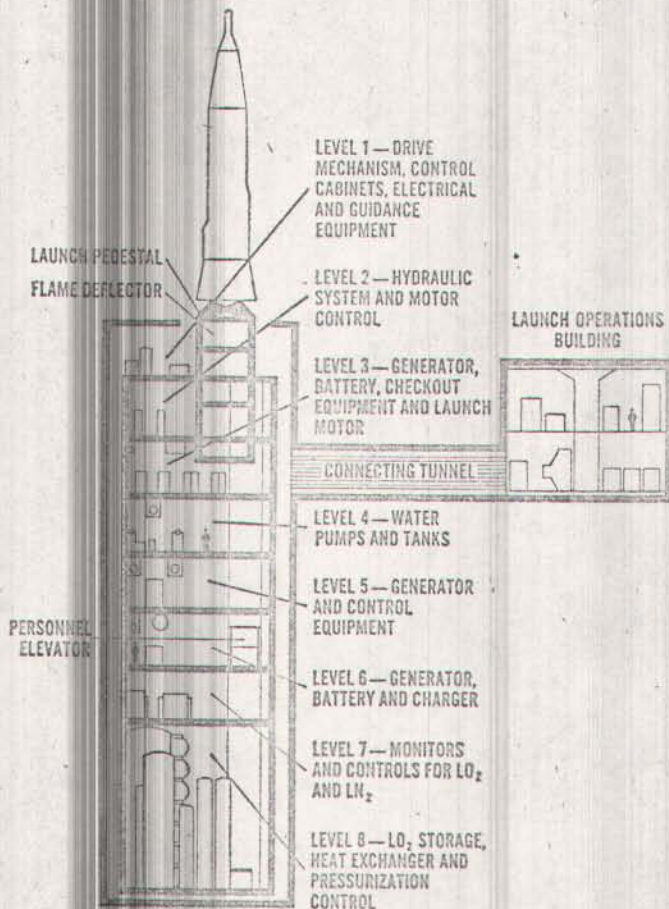
At staff level, Hastings has military and civilian personnel working in joint effort to strengthen the nation's defense system.

In an effort to accomplish the site activation mission in the most efficient, economical and timely manner, SATAF is responsible to the Deputy for Site Activation, who is directly under the Commander of Ballistics Systems Division, in Los Angeles. A melting pot of technologies has resulted from close communications between each work skill, said Hastings.

*Lincoln
Journal
2 Sept
1961*



Lincoln Missile Complex—12 Atlas Sites.



Cutaway drawing of Atlas silo.

5

This combination of human effort is giving America its first weapon which can place nuclear warheads on nearly any spot on the globe from the bases.

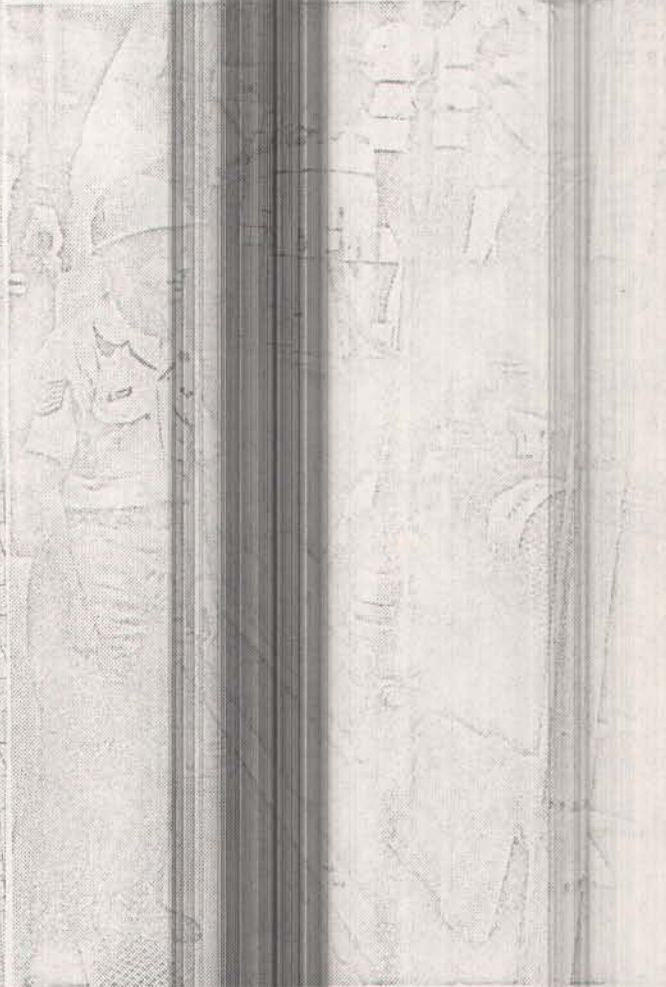
Lincoln's \$150 million 12-complex program, which is part of 129 Atlas complexes being built across the nation, is scheduled tentatively to be finished in late summer or early fall, 1962.

LINCOLN JOURNAL

2 Sept 1961



Readying launching platform for installation.



Air Force man checks diesel generator, one of thousands of pieces of machinery in completed complex.

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"STAR" 4 Sep 61

Freak Tornado Kills Missile Site Worker

Edward L. McCartney, 50, of #118 Calvert was killed Saturday night when a "freak tornado" lashed through the missile base near Palmyra where he was standing guard.

According to Otoe County Sheriff Ralph Hall, who investigated the death, McCartney was in a guard trailer at the gate to the base when the tornado caught it up and rolled it on its sides for about 150 feet.

Sheriff Hall said McCartney was apparently then thrown from the vehicle as its roof tore open, landing some 12 feet north of the point where the trailer came to rest.

First Day

It was McCartney's first day on the job, Sheriff Hall added, and he had been on duty only a few hours when the incident occurred.

Dr. Stephen Gatley of Syracuse pronounced the Lincolnite dead of a broken neck. The physician said McCartney also had several bruises, a broken leg, and lacerations on the back and side of his head, all apparently received in the tossing trailer.

"It was definitely a freak tornado," said Sheriff Hall; "it did little other damage in the area aside from tearing some wires down."

McCartney was born in Optima, Okla., and had lived in Weeping Water before coming to Lincoln in 1940. Previous to his job at the missile base, he had spent 15 years as superintendent of the dairy at the Nebraska State Penitentiary.

He was a member of the College View Masonic Lodge 320, AF & AM.

His survivors are: a wife, Thelma; son, James of Minneapolis, Minn.; mother, Mrs. Nannie James of Elmwood; sisters, Mrs. Zola Peterson of Omaha, Mrs. Marguerite McKinnon of Beaumont, Calif., and Mrs. Thelma Trunkenbolz of Lincoln.

Funeral services are pending.

Freak Twister Hits Elmwood Missile Site

Elmwood—A "freak tornado" like the one that killed Palmyra missile base guard Edward L. McCartney of Lincoln also hit a missile site near Elmwood.

Frank N. Vivant of the Western Contracting Co., Lincoln-area missile site builder, said the twister picked up a trailer, rolled it over and split it.

A Quonset hit was damaged and a car was demolished, Vivant said, but no injuries were reported.

Elmwood is approximately 11 miles northwest of Palmyra.

OMAHA DISTRICT
LINCOLN JOURNAL, LINCOLN, NEBRASKA
7 September 1961

LETTERS TO THE EDITOR

Missile Sites

Lincoln —I have a criticism which should be voiced by people who are interested in the future of our great country.

The picture page, by Marvin Hatcher (Sept. 2), about the 12 missile bases around Lincoln described how the missiles were built, the dimensions of the silos, how constructed, how many men it takes to operate each center, and the exact location of each site.

Russia doesn't need to send spies over here because we publish such information. They only have to take articles, pictures and maps, such as these, from newspapers over the country and accordingly plan a systematic destruction of our United States.

After his inauguration, President Kennedy asked news services to impose a self-censorship. I believe it's time for the news media of this country to assume the responsibility of a self-censorship to help protect us.

DORA M. ROLLOGAS

The article mentioned was prepared with cooperation of

the SMTAF Command (Site Activation Task Force) and SAC (Strategic Air Command) officials and public information units. The article was cleared for security and written by a staff member who is a former SAC information member and who is security-conscious.

The letter writer has well expressed one side of the information dilemma. The other side is the problem of the military in making the public aware of where the military spending is going and why it is essential to the country, along with the importance of avoiding delays in missile site construction due to labor interruptions.

Like many aspects of democracy you can't achieve both opposites with one policy.—Editor.

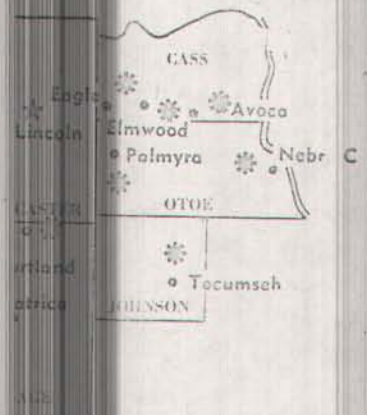
Weeping Water — Marvin Hatcher's article (Sept. 2), entitled "Atlas Base Construction at Full Speed," was quite informative, but the map which accompanied the article was misleading.

Three of these sites are in Cass County, within a stone's throw of highway 34. One is between Nehawka and Weeping Water; one between Weeping Water and Elmwood; one between Elmwood and Eagle.

Let's put the sites on the map where the holes in the ground are located.

C. C. BEACH

Bravo to Reader Beach for a sharp eye. A mistake was made in the art department



when the sites were arranged on Highway 2, not Highway 34. The corrected map appears above.—Editor.

"STAR" 7 Sep 61
**New Atlases
Salted For
Lincoln Sites**

Omaha (AP) — Strategic Air Command headquarters said Wednesday the Atlas missile complex at Lincoln will be equipped with the new F series missile, which was tested at Cape Canaveral, Fla. last month.

The Atlas F, capable of placing a nuclear payload on a target more than 6,300 miles away, flew a 5,000-statute-mile course down the Atlantic missile range in its test and within 30 minutes hit "on target."

The F series' main propulsion system develops 389,000 pounds of thrust, 165,000 in each of two booster engines and 57,000 in a single sustainer engine.

The Lincoln launch sites are underground sites. Other bases under construction to be equipped with the F series Atlas are at Schilling AFB, Kan.; Altus AFB, Okla.; Dyess AFB, Texas; Walker AFB, N.M.; and Plattsburgh AFB, N.Y.

The Omaha Atlas complex, which has the so-called coffin type launcher, employs the D series and is not affected by the entry of the series F Atlas into the SAC arsenal.

White Nation Watches Football

Missilemen Are on Pushbutton Alert

By Joe R. Seacrest

Cheyenne, Wyo.—While Nebraskans and millions of other Americans enjoyed their regular Saturday football, crews of Air Force missilemen were maintaining combat push-button warfare readiness here at the largest Atlas missile base in the Western free world.

The world's millions read daily the latest news of the international countdown on the Berlin question. But here in Cheyenne a small number of highly trained, screened, dedicated men are at battle stations, the launch pads of ready-to-fire intercontinental nuclear ballistic missiles.

Their launch areas are patrolled by men with carbines.

Their crews do everything in twos to guard against crew sabotage of any one of the million wires or valves controlling the missile weaponry whose individual destructive capability is virtually equal to all the TNT used in World War II.

Their launching officers wear loaded sidearms to protect the verification-of-launching codes which separate the continuous exercise alerts from the real order to fire. The order that might come if the President so directs over the awesome red telephone connecting the White House and the Strategic Air Command underground hole at Offutt Air Force Base in Omaha.

The order to fire missiles requires a coded communi-

cation verification to protect the world from the catastrophe of a mistake.

Their half million dollar electric computers contain pre-selected missile target data.

Missiles Here in '62

Atlas "F" missile sites in the Lincoln area are intended for completion in the fall of 1962.

Already 600 Air Force personnel to be assigned to the Lincoln Air Force Base are attending missile training schools. Operational personnel will be deployed to the 12 sites:

Avoca, Brainard, Beatrice, Cortland, Eagle, Elmwood, Nebraska City, Palmyra, Tecumseh, Seward, Wilber and York.

Maintenance and command personnel will be located at the Lincoln Air Force Base.

These and other personnel will comprise the 551st Strategic Missile Squadron, a portion of the Strategic Air Command's 818th Air Division, presently commanded by Col. Thomas G. Corbin.

Each launching pad will be hardened, buried 174 feet in concrete protected silos in the ground. The missile maintenance hangar is now in construction. The missile command will be visually directed with the bomber command and alternative command posts provided.

Their nose cones are loaded with nuclear warheads to be armed in the process of flight.

These men control the minute-by-minute "breathing" of an operational weap-

on of 230 tons whose trajectory into space will reach a height of 500 miles and cross continents to distances up to 9 thousand miles to target at speeds of 16,000 miles per hour.

Elapsed time? Around 29 minutes.

Accuracy? One Pacific test fired within 2,400 feet of target pin point.

Firepower? Each missile probably equals all the TNT dropped on Germany during 5 years of World War II.

A whole generation of missile weapons has been conceived in the awesome time compression of 15 years from idea to operational missile—work that represented centuries of man-years of effort, research, and technical and industrial development.

Yesterday it was Atlas D lying horizontal on exposed launching pads.

Today it is Atlas E, toughened but still horizontal and exposed.

Tomorrow at Cheyenne, Lincoln, and Kimball, Neb. and other points it will be Atlas "F" hardened in a below-ground launching site of 174 feet of buried depth.

Next day Titan, also hardened.

The day after tomorrow (1962) the Atlas series will still be operational but made technologically obsolete by the successor generation of Minuteman, a small solid fuel missile, defense hard-

Continued: Page 3A, Col. 1

Quality-Tender Meat
at Klein IGA, 815 So. 11. Open
Sun. 7:30am-10pm.—Adv.

Hundreds of U.S. Missiles Operational in Two Years

Continued from Page 1

ened by burying, operated without crews on the site, and built on assembly lines at fractions of Atlas' cost.

When the operational missile was activated at Warren Air Base here, the American continent entered the age of push button warfare.

Today only Warren and Vandenberg, Calif., have operational missiles.

In two years, the nation will have hundreds.

The missile thus joins SAC's 1,500 manned bombers based at Lincoln and around the world in a new strategic concept of Mixed Forces.

SAC commanders state that the missile will not replace the manned bomber, that the two are complementary weapons.

Bomber advantages include an ability to deploy,

use in limited wars, over-target reconnaissance, greater versatility of target selection over target positive ability to control and call back upon false alarms, plus the ability to reuse again and again.

The missile advantages include hypersonic speeds (16,000 mph). It is difficult to intercept once the nose cone containing the war head has separated from missile (like a bullet leaving a rifle) 5 minutes after launch.

Missiles, in addition to compounding the enemy attack problem, have space peace potential.

The first operational missile with launching pad cost almost as much as the world-famous Nebraska Capitol—\$7.5 million. On mass production basis now, the cost of each equipped launching pad is done to \$2.5 million. With mass-produced Minuteman, it may cut itself in half again.

Ground-missile guidance talking is at the rate of twice a second and a separate vernier engine exists to control the speed within a tolerance of 1 foot per second rate if any deviation of speed occurs at 22,000 feet per second just ahead of nose cone separation.

The mixed force concept of missiles and bombers, the Strategic Air Command spends 20% of the U.S. defense dollars and controls 90% of this nation's nuclear firepower.

What is the dollar price to be put upon peace?

In the SAC concept, the deterrence of this nuclear firepower upon the enemy may well have bought several years of cold war peace, as well as an ability for the Western World to bargain from a position of strength in the count-down on Berlin.

Only 3 years old by test firing, the missile concept is changing from liquid to solid fuels.

If you would see the myriad of pipes and valves and problems of moving and mixing nitrogen and liquid oxygen at boiling temperatures toward absolute zero in an 81 foot missile whose shell is thinner than a dime, without structural supports, and maintained in shape only as a balloon pressured by inflation with helium, you can quickly grasp the design and operational advantages of solid fuels.

Some Atlas "D" launchers here require 105-men crews. Lincoln's Atlas F will need only 76.

Titan requires but 55. And solid fuel Minuteman (first test-fired this February) only 8.

Atlas requires a warmup readiness period. Minuteman reacts on the first button push.

Comparatively, Minuteman is survivable, simple, reliable, and cheap.

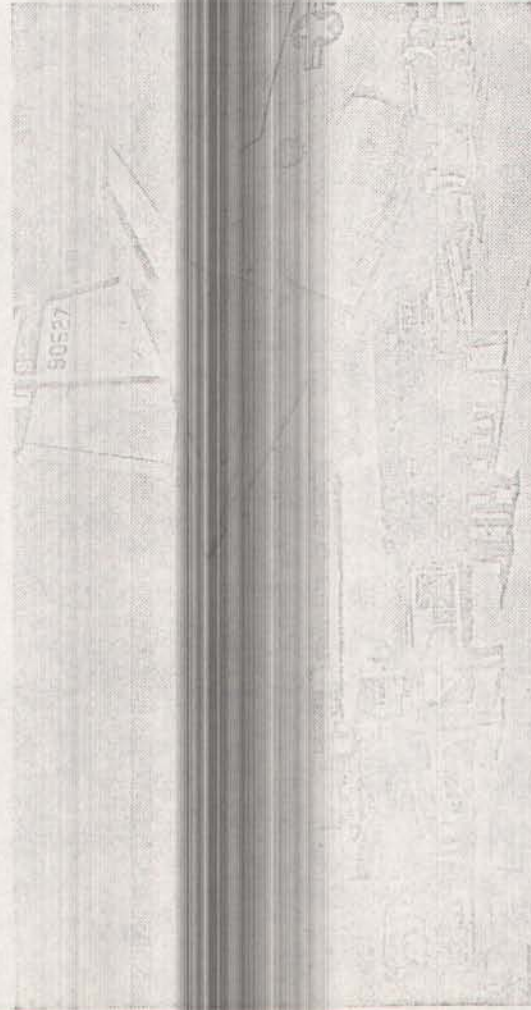
The support and maintenance function with Atlas requires more men and equipment than the "bird" or its launch pads.

Neither Atlas nor Minuteman can be jammed after nose cone separation.

Recent missiles have shifted from ground guidance to carried-guidance systems using pre-set target and flight course maintained by inertial guidance systems which work on the same principle as the piano tuning fork. This does away with some complicated radar and guidance steps needed by earlier Atlas series.

Though it may be obsolete by comparison with the Minuteman generation, Atlas is a fantastic achievement.

Gleaming Killer Comes To Lincoln



The 75-foot long Atlas emerges from a C-133.

By DON WAITON
Star Staff Writer

The killer came to Lincoln Friday. Its long steel frame gleaming in the brilliant October sunshine, Lincoln Air Force Base's first operational Atlas missile slid down a ramp through the huge double doors of a giant C-133 Cargomaster.

The 25-ton missile arrived by air from San Diego the night before.

It left the plane reluctantly, its massive weight snapping cables like threads.

A one-inch cable used to help lower the missile down to the ground on its special steel tracks cracked through the air like a whip, slightly injuring two General Dynamics technicians.



Atlas (Head-On) . . . Ready To Go.

The delicate unloading process consumed two hours' time.

Arrival of the 75-foot-long intercontinental ballistic missile signaled the 818th Air Division's entry into an era of "mixed force," a combination of manned bombers and offensive missiles.

This particular Atlas will eventually be delivered to one of the Lincoln area's 12 launch sites.

(The last of the dozen silos will be turned over to the Air Force Monday by the Army Corps of Engineers, marking the completion of construction.)

First, the missile—which was towed to an assembly and maintenance building adjacent to the LAFB flight line ramp area — will be completely assembled and checked.

That process takes several months.

The deadly nose cone, equipped with nuclear capability, is transported separately. It is fitted onto the missile at launch site.

Twelve more Atlases will be flown to Lincoln in coming weeks, the last scheduled to arrive by winter.

The Atlas squadron will be operational—ready to fire —by next summer or fall.

A number of Air Force officials and civilian guests observed Friday's unloading ceremonies.

The missile was mounted on its own 4-wheel vehicle which rested on steel tracks within the C-133. A tractor towed it to the million dollar assembly building.

Atlas travels more than 16,000 miles an hour in a trajectory reaching up to 500 miles altitude. It can reach an enemy target within 30 minutes.

Lincoln's missiles are stored in underground launch silos 174 feet deep.

"JOURNAL" 16 Oct 61

Seward

Atlas Silo Completed

Site Activation

Unit Takes Over

By Marvin Hatcher

Seward—The last and meanest Atlas F missile silo complex's construction phase in the Lincoln area is complete.

This marks the end of a long, hard struggle against shifting sand, and gallons upon gallons of water, dozens of feet underground.

Beginning June 3, at times, workmen here at the Atlas missile site worked shoulder to shoulder in an effort to keep back wet clay which flowed into the excavation almost as fast as it could be removed.

Work nearly stood still on various occasions:

Even with the extra home building problems for the nation's first operational intercontinental ballistic missile, other work was set at a more rapid pace, and the construction phase was completed on schedule according to Col. Vernon L. Hastings, Site Activation Task Force commander (SATAF) at Mead, a part of the Air Force Ballistic Systems Division.

A milestone in the missile history of the Midwest was climaxed by the formal turnover of the site to Hastings by Col. John E. Minahan of the Lincoln Area Corps of Engineers Ballistic Missile Construction Office.

On the completion of the site installation and check-out phase in a few months, which will include a ready missile inserted in the silo hole, Hastings will turn the site over to the 551st Strategic Missile Sqdn., a unit of the 818th Air Division, Lincoln Air Force Base.

Engineers Turn Over Last Missile Silo To Air Force

A brief ceremony took place Monday at the Seward Atlas missile complex marking a significant milestone in the transfer of the last Lincoln Air Force Base intercontinental ballistic missile silo from the Corps of Engineers to the U.S. Air Force.

Air Force and civilian officials witnessed the formal turnover of the silo from Col. John E. Minahan, Lincoln area engineers ballistic missile construction officer, to Col. Vernon L. Hastings, commander of the Wahoo Site Activation Task Force (SATAF), a part of the Air Force Ballistic Systems Division.

Installation and check-out of

missiles, sub-systems and aero space ground equipment is being continued by the Air Force with the integrating contractor, General Dynamics/Astronautics.

Upon completion of the installation and check-out phase, the completed complex with its ready missile will be turned over to Col. Edward P. Denton, commander of the 551st Strategic Missile Squadron, of the 818th Air Division, SAC, Lincoln Air Force Base.

At the Seward complex, a unique feature is the heavy steel piling which extends 25 feet below the bottom of the silo into the soft underlying material and whose upper ends are embedded in concrete walls.

Lincoln is one of the 6 Atlas "F" sites now in various phases of construction or installation and checkout. It is the second squadron to have completed the construction phase, the first being the Schilling squadron at Salina, Kan.

Other Atlas "F" sites are being built at Salina, Kan., Altus, Okla., Roswell, N.M., Abilene, Tex, and Plattsburg, N.Y.

Missile Bases

dealing with big strikes as well as improving methods for employees and labor organizations to solve their problems.

Unions Renew No Strike Pledge On Work At

Washington (AP)— Secretary of Labor Arthur J. Goldberg reported Tuesday that after two recent missile base labor strikes he has obtained a renewed no-strike pledge from labor unions involved in base construction work.

Goldberg submitted a summary to President Kennedy saying that although work time lost to strikes has been vastly reduced in the 4 months since Kennedy established a

Missile Sites Labor Commission the number of lost work hours is still too high.

"It is too high in view of the critical importance to the nation of our missile and our space program," Goldberg said in a letter to the President.

Goldberg held a news conference to release the missile labor situation and to report on a two-day meeting of the President's Labor Management Advisory Committee that ended Tuesday.

The latter committee—made up of representative of labor, management and public — is busy working on a series of 5 policy reports for submission to Kennedy.

The reports will deal with suggested policies on wages and prices, collective bargaining, economic growth and unemployment, automation, and maintaining American markets abroad.

The labor secretary said he hoped that some if not all the reports will be ready to give to Kennedy after the labor management panel's next meeting Nov. 23, which will be its 6th full session. The two most far advanced reports deal with automation and collective bargaining.

Goldberg said that the collective bargaining report will suggest new procedures for

SAC, ICBM Bases Seen As Top Enemy Targets

"STAR" 26 Oct 1961

Washington (AP) — Strategic Air Command and intercontinental ballistic missile bases in this country probably would be prime targets in the event of a nuclear war.

And areas in the immediate vicinity of such military installations also could be in for trouble in such a conflict.

Although no one knows for certain, there appears to be general agreement here that military bases holding the nation's nuclear power, rather than cities, would bear the brunt of a quick enemy strike.

Stanart L. Pittman, assistant secretary of defense for civil defense, said it is doubtful

targets."

Pittman said protection against a direct hit by a nuclear weapon "is practically impossible but protection can be taken against fallout."

Adam Yarmolinsky, special assistant to the secretary of defense, said in a recent speech that "a reasonably planned enemy attack now or in the next few years would concentrate on military targets" because few weapons could be spared to hit cities without military installations.

"We can only guess," Yarmolinsky said, "but I think Omaha would be a much more likely target than Washington."

Yarmolinsky didn't amplify this remark but presumably he had in mind that Offutt Air Force Base, near Omaha, is headquarters of the Strategic Air Command. An Atlas missile complex also rings Offutt and a larger Atlas facility is spotted not far away

at the Lincoln Air Force Base.

The launching sites for long-range Atlas, Titan and Minuteman missiles generally fan out like spokes in a wheel from one control point — in most cases a SAC base.

Scattered Bases

ICBM bases are scattered through the central and western sections of the country, including the two in Nebraska and others in Montana, North and South Dakota, Missouri, Colorado, Idaho, Arizona, Kansas, Arkansas, Wyoming, Oklahoma, Texas, Washington and California.

On the question of fallout, a House Military Operations subcommittee said a study last year by government meteorologists indicated that an attack on these missile sites would pose this probability of fallout on cities:

Schilling AFB, Salina, Kan. — Kansas City, 50%; Forbes AFB, Topeka, Kan. — Kansas City, 60 per cent; Lincoln AFB, Lincoln, Neb. — Omaha, 60%.

Offutt AFB, Omaha — Omaha, much greater than 60%; Larson AFB, Moses Lake, Wash. — Spokane, 40%; Fairchild AFB, Spokane, Wash. — Spokane, much greater than 40%.

Nebraska News

ful that the objective of such a war within the next few years would be to destroy population or industry.

"Nobody knows enough to say whether cities will or won't be targets," he told a reporter, "but we do know enough to know that cities would be subject to fallout from a strike a few hundred miles away."

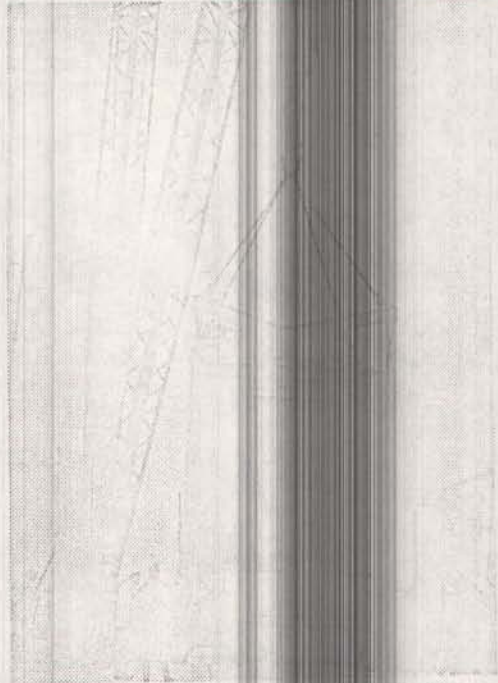
'Calling Impractical'

Asked if it is possible to rate U.S. cities as potential targets, Pittman said:

"We think it is impractical to try to rate cities as likely or unlikely targets. We are not using for civil defense planning any list which distinguishes between cities as



Platform in place at top of silo . . . Workmen lower structure inch by inch.



Two-thirds into silo . . . Platform will be in approximately this position when missile is fired.

Story below.

—World-Herald Photos.

'Ticklish' Job Goes Without Hitch—

Atlas Launching Platform Installed

By Harold Cowan

World-Herald Staff Member

Brainard, Neb.—A launching platform as high as a three-story building was installed Saturday morning at the Atlas missile complex near here.

A job described by engineers and heavy equipment men as "ticklish" went without a hitch.

In a little more than an hour the 275-thousand-pound steel structure was "in the groove" at the top of a 174-foot deep concrete silo two miles northeast of Brainard.

It is the second such installation at a Lincoln Air Force Base missile site.

The first was last month near Tecumseh.

Essentially a large elevator used to support the missile, the launching platform is constructed of steel beams and plates. It is 17 feet square and 43 feet tall.

The Atlas missile sits on the launching pedestals atop the platform, and supporting equipment is installed on three levels below in the platform.

In one unit the platform was lifted off supporting structures with a two-hundred-ton capacity guy derrick standing 120 feet high. The platform was then rotated over the silo opening and lowered inch by inch with four wheels placed in guide rails.

The silo is an underground, concrete-lined cylinder 52 feet in diameter. Reinforced concrete walls are 2 1/2 feet thick at the bottom and nine feet thick near the silo cap. The cap is made of thick, reinforced concrete with a rectangular opening to permit raising of the missile and launching platform.

Two overlapping, hinged doors are on the opening.

The platform was lowered only about two-thirds of its height into the silo Saturday.

After the missile is in place, the platform will be lowered to its stand-by position near the bottom of the silo. Firing position is from the surface.

In the silo, the launching platform is supported by steel cables and is raised or lowered by a driving mechanism, counter-balanced by weights of approximately 270 tons, in the same manner as a public elevator.

Contract Is Let For Atlas Silos, Including Lincoln

"See 1/24/61"
Washington — The Air Force announced Thursday the award of a \$95 million contract to General Dynamics Corp., Astronauts Division, San Diego, Calif., for Atlas silo launching squadrons.

The silos are pits for launching Atlas missiles. Included is work at Lincoln Air Force Base.

The contract supersedes an earlier letter of intent for the same amount.

"Atlas news" 24 Nov 61 First Atlas F Silo at Walker Turned Over to AF

The first Atlas F silo at Walker AFB was completed and turned over to the Air Force on Oct. 31, with Maj. Gen. A. C. Welling, Deputy for Site Activation, BSD, as speaker during ceremonies held to mark the event. Col. R. T. Farrowlough, SATAF Commander at Walker AFB, was host for the affair.

Rep. Martin Probes Missile Bases

"See 4 Dec 61" CONTINUES ON 7-MAN JUNKET

Kearney (UPI) — Rep. David Martin, R-Neb., left Sunday on a personally-financed trip to missile bases in Kansas to see if there is waste in the fields of both labor and management at construction sites.

Martin went to Schilling Air Force Base at Salina, Kan., and planned to go from there to Forbes Air Force Base at Topeka and McConnell Air Force Base at Wichita. He said he hoped also to go to Lowry Air Force Base at Denver.

Martin has already visited Offutt Air Force Base at Omaha, Lincoln Air Force Base and Warren Air Force Base at Cheyenne, Wyo.

Martin has made the trips at his personal expense because the chairman of the House Education and Labor Committee, Adam Clayton Powell, turned down Martin's request for committee authorization.

Martin said his first trip turned up what he described as "numerous examples of waste of government money on missile base construction projects."

Hurried Construction Blamed for Bad Guess On Missile Sites' Cost

Air Force Put Earlier Estimates
For Bases \$225 Million Below
\$1,273,000,000 Current Figure

By WALL STREET JOURNAL Staff Reporter

WASHINGTON—The Air Force said hurry-up construction procedures were mostly to blame for a \$225 million bad guess on the cost of building launching bases for Atlas and Titan missiles.

Air Force Secretary Zuckert told a Senate Armed Services subcommittee that as a time-saver the Air Force began building the huge concrete bases long before the missiles they were to house had been flown, "much less fully tested," and construction schedules were "lightly compressed."

This procedure is saving years over traditional step-by-step methods, he said, but it also has compounded the problem of estimating costs accurately. As the missiles themselves were built and test-flown, the need for often-extensive changes in the base construction became apparent.

Estimating is difficult enough for routine construction; and missile bases have had more than their quota of the 'normal' contingencies—bad weather to adverse sub-surface conditions, from the national steel strike (in 1959) to local labor disputes," Mr. Zuckert said. "Beyond doubt, however, missile base construction has never been routine. Whether the test is size, first-of-a-kind technology, or urgency, it has no parallels in past experience."

These are the reasons why estimates of missile-base construction costs have jumped to \$1,273,000,000 from \$1,048,000,000 last July, Mr. Zuckert said.

WALL STREET
JOURNAL
5 March 1962

What is "unique" in this program is the extent to which a base change generates indirect costs, Mr. Zuckert declared. "Typically, major changes did not occur until the work was well under way, precisely when their impact was greatest," he said. "In the later stages, moreover, the effect was further heightened as changes accumulated, and were superimposed, one upon the other. So it was, all too often, that contractors themselves were not aware of the full cost of a change until after the fact, and only then were able to submit documented cost proposals."

The official said that by February 1961, when the Air Force gave Congress an overall cost estimate of \$986.2 million, estimates submitted by contractors were mounting in "alarming proportions."

"At first, contracting officers found it difficult to credit these estimates with much more than an inclination on the part of contractors to protect themselves," he said. "But as discussions with contractors got down to causes, and the hard fact on impact costs were laboriously developed, our caution gave way to a recognition that, if contractors' proposals were generally high, ours were often low."

After a preliminary review, Mr. Zuckert said, the Air Force submitted the \$1,048,000,000 estimate to Congress last July, at the same time warning that it might have to be revised upward later "when the costs of changes and claims are more definite."

Thus, with the revision of claims and the submission by contractors of a "flood" of new and revised claims, the overall estimate has been boosted again, Mr. Zuckert said.

He expressed hope that the current estimate is accurate. He noted that it includes a \$25 million cushion to cover additional unforeseen costs.