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REPORT BY THE

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Comptroller General

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Inadequate Contract Administration On Housing Renovation Project At Malmstrom Air Force Base

The Air Force did not follow sound acquisition and contract administration practices on a \$5.5 million housing renovation project at the Montana base. The contractor has claimed the Air Force owes an additional \$1.9 million. A preliminary Air Force estimate shows that it could cost \$1.9 million to correct the contractor's alleged work discrepancies and complete the project.



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PSAD-80-32
MARCH 11, 1980



COMPTROLLER GENERAL OF THE UNITED STATES

WASHINGTON, D.C. 20548

B-197273

S.
The Honorable Max Baucus
United States Senate

The Honorable John Melcher ~~Rosa~~
United States Senate

The Honorable Ron Marlenee
House of Representatives

Ronald C.

This is our report in response to your request that we investigate the renovation work performed on a housing project at Malmstrom Air Force Base near Great Falls, Montana. The Air Force did not follow sound acquisition and contract administration practices.

As arranged with your office, unless you publicly announce its contents earlier, we plan no further distribution of this report until 10 days from the date of the report. At that time we will send copies to the Secretaries of Defense and the Air Force and make copies available to other interested parties.

Comptroller General
of the United States

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REPORT OF THE
COMPTROLLER GENERAL
OF THE UNITED STATES

INADEQUATE CONTRACT
ADMINISTRATION ON
HOUSING RENOVATION
PROJECT AT MALMSTROM
AIR FORCE BASE

D I G E S T

In 1976, the Air Force authorized a family housing renovation project at Malmstrom Air Force Base near Great Falls, Montana. The purpose of the project was to improve about 490 housing units, originally constructed in the early 1950s, by providing more modern kitchens and bathrooms, larger dining areas, and improved exterior privacy. Praxis Limited won the competition for this project and was awarded a fixed-price contract for \$5,483,000. CNG 00685

The project was supposed to be finished in October 1978, but it still is not fully completed and many work discrepancies remain. GAO's use of the term "discrepancies" does not reflect any legal interpretation by GAO that the contractor's work did or did not meet contract requirements. As of November 13, 1979, there have been 41 contract modifications adding about \$263,000 to the original contract price. However, estimates to correct the remaining discrepancies and complete the project range from \$1.2 million to \$1.9 million or from 8 to 12 times the amount the Air Force has retained to cover inadequate or incomplete contractor work. Furthermore, Praxis Limited claims the Air Force still owes it about \$1.9 million because of Air Force caused delays and work it performed outside the scope of the contract. Members of Montana's congressional delegation asked GAO to investigate this project.

FINDINGS AND CONCLUSIONS

The Air Force did not follow sound procurement and contract administration practices and procedures or see that they were in place at Malmstrom when the Praxis contract was awarded. Air Force officials compressed the time required for completion of the architect-engineer contract and the award of the Praxis contract

so that they could use Operation and Maintenance funds that would become unavailable at the end of the fiscal year.

The lack of a good, cohesive contract management organization and inadequate staffing of key positions at Malmstrom precluded successful administration of the contract. For example, contracting officers

- did not always follow regulations;
- ignored or did not effectively use available data from civil engineering, legal, or audit staff representatives;
- did not establish an effective and well documented civil engineering inspection and acceptance system; and
- did not enforce contract clauses to insure acceptable contractor work performance.

Contract management also suffered because of poor working relationships between Malmstrom's civil engineering and procurement organizations.

Although the project is over 1 year beyond the scheduled completion date, the Government still has not obtained an adequate end product or assurance that it has received appropriate consideration for the money it has spent on the project.

RECOMMENDATIONS

To preclude future problems similar to those experienced on the Malmstrom project, GAO recommends the Secretary of the Air Force see that

- an adequately staffed contract management organization is established at base level to administer major housing renovation construction projects such as the Praxis contract,

- projects are properly planned to eliminate any yearend rush to obligate funds, and
- proper procedures and regulations are followed and contract decisions are well supported and documented with higher headquarters monitoring.

COMMENTS OF RESPONSIBLE OFFICIALS

The Air Force, the former project engineer, and the contractor commented on a draft of this report. (See ch. 5.) All agree that contract administration at Malmstrom could have been better. The contractor does not agree with any suggestion that its work was shoddy or performed in an "unworkmanlike" manner. That issue may ultimately require resolution in the courts.



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ABBREVIATIONS

A-E	architect-engineer
AFB	Air Force Base
CE	Civil Engineering
GAO	General Accounting Office
IG	Inspector General
SAC	Strategic Air Command

CHAPTER I

INTRODUCTION

In the early 1950s a family housing construction project for U.S. Air Force enlisted personnel and their families was completed at Malmstrom Air Force Base (AFB) near Great Falls, Montana. This project, called the Wherry housing project, consisted of 87 frame buildings constructed on and off base, each with four, six, or eight housing units. Each living unit consisted of two to four bedrooms, two baths, living and dining areas, and kitchens. In all, there were 492 apartments in the project.

Due to the age and poor condition of the facilities, the Air Force requested an authorization for construction of new housing units in the fiscal year 1975 military family housing new construction program. However, the Congress did not include the units in the 1975 authorization act. Since the Air Force considered the Wherry housing units at Malmstrom to be some of its worst, it requested a project in fiscal year 1976 to renovate the units, providing more modern kitchens and bathrooms, larger dining areas, and improved exterior privacy. Officials at U.S. Air Force Headquarters approved the project and allocated \$5,980,900 in construction funds in July 1976. The amount included about \$1.5 million of maintenance and repair funds which had to be obligated by September 30, 1976, or the authority to spend those funds would lapse.

Renovation work included new vanities and shower enclosures in the bathrooms; new powder rooms, new storage closets, new walls between units; and new kitchen cabinets, stainless steel sinks, dishwashers, and garbage disposals in the kitchen area. Exterior work included concrete patios, sidewalks, privacy fences, and new garages.

AWARD OF ARCHITECT-ENGINEER AND RENOVATION CONTRACTS

In April 1976 the Air Force selected the architect-engineer (A-E) firm of Schooley Cornelius Associates to design the required renovation work and directed the firm to proceed with the design work on May 17, 1976. All design work was completed by October 1, 1976.

Invitation for bids for the renovation project was issued on August 4, 1976, and the bids opened on September 3, 1976. Of the four firms bidding on the contract, Praxis Limited, from Mountain View, California, had the low bid of

\$5,483,000, or about \$500,000 below the Air Force estimate. A Great Falls firm submitted the next lowest bid of \$7,763,312. The Air Force awarded the renovation contract to Praxis on September 27, 1976, for \$5,483,000 and issued the notice to proceed on October 22, 1976. The scheduled completion date of October 22, 1978, was later changed to November 25, 1978.

As of November 13, 1979, the contract was still not completed. There have been 41 modifications adding \$263,190.69 to the contract cost.

SCOPE OF REVIEW

We tailored the scope of our work to be responsive to the request from the members of the Montana congressional delegation. (See app. I.) We reviewed files relating to the award and administration of the A-E and Praxis contracts at the Malmstrom AFB Procurement and Civil Engineering (CE) Offices and interviewed key officials assigned to both organizations. We reviewed the Air Force Inspector General's report on this matter. We examined files and interviewed officials at Praxis' office. In addition, we interviewed the former base project engineer and the former contracting officer assigned to the contract during the major part of the renovation work. We also toured the worksite and housing units to see the results of the work that Praxis had performed. This fieldwork was performed during July through September 1979.

We specifically excluded from our scope of work any determination or evaluation concerning the adequacy of the specifications and drawings for this project. We made this exclusion with the concurrence of the members of the Montana delegation because Praxis has filed a \$1.9 million claim contending, in part, that contract specifications and drawings are inadequate. Since that matter may ultimately be the subject of litigation, it would be inappropriate for us to comment at this time on the adequacy of the specifications and drawings.

CHAPTER 2

INADEQUATE PROCUREMENT AND

CONTRACT ADMINISTRATION ACTIONS

The Malmstrom AFB Wherry renovation project was impeded from the start by many procurement and contract administration problems. At Malmstrom AFB, the Air Force did not establish sound contract administration practices and procedures or see to it that they were in place when the Praxis contract was awarded. The haste of awarding a contract; the lack of a good, cohesive contract management organization; inadequate base level staffing; and poor working relationships between base organizations adversely affected the administration of the contract.

Contract administration functions were not performed in accordance with procurement regulations. Contracting officers ignored or did not effectively use civil engineering, legal, or audit staff representatives; never adequately established an effective and well documented inspection and acceptance system; and did not enforce contract clauses that provide for acceptable work performance by Praxis. As a result, incomplete work was allowed, the completion schedule has slipped over 1 year, and the Government's interests may not have been adequately protected.

Although Malmstrom's procurement records show that the project is essentially complete, problems still continue. A recent civil engineering estimate of costs to correct discrepancies and complete the project in accordance with design specifications shows as much as \$1.9 million may still be needed. Praxis, on the other hand, has submitted claims to the Air Force totaling nearly \$1.9 million to cover what it contends were Air Force caused delays and work the Air Force required outside the scope of the contract.

Contract administration is the performance and coordination of all those actions taken after contract award to obtain compliance with all contract terms and requirements, including timely delivery of services, acceptance, payment, and closing of the contract. In short, it is to see that the Government gets what is contracted for. These actions include all technical, financial, audit, legal, administrative, and managerial services in support of the contracting officer. The Air Force failed to see to it that these actions were adequately taken on the Malmstrom Wherry housing renovation project.

LACK OF AIR FORCE SUPPORT FOR
GOOD CONTRACT ADMINISTRATION

Although advised by Strategic Air Command (SAC) Headquarters early in the procurement cycle of problems that could arise in the award and administration of a large renovation project, responsible Air Force officials at Malmstrom AFB failed to ensure the proper environment for good contract administration. The Air Force awarded the A-E and renovation contracts quickly in order to use up maintenance and repair funds that would become unavailable at yearend and did not establish an effective well-staffed contract management organization. The latter led to a poor working relationship between base organizations. Although Malmstrom civil engineer inspectors recommended that the project be stopped because of poor contractor performance, base procurement officials and SAC engineers recommended that it continue.

Air Force concern for awarding
the contract quickly

Completion of the A-E contract and award of the Praxis renovation contract were hastily accomplished because of the desire to obligate \$1.5 million in maintenance and repair funds before the end of the fiscal year. The Air Force knew that such funds could no longer be obligated after September 30, 1976, and believed the housing renovation project could be dropped if a construction contract was not awarded by that date.

As a consequence, efforts were made to speed up the preaward process. The Air Force compressed the time frame for selection of an A-E, normally 60 to 90 days, to less than 30 days. The director of Engineering and Construction at SAC Headquarters told the Malmstrom civil engineer in March 1976 that, because of the desire to award the renovation contract before October 1, 1976, "Every effort must be made to short-cut the normal time consuming procedures, i.e., plan ahead."

The base contracting officer in May 1976 waived the requirement for a field pricing support report to determine the reasonableness of the proposed A-E cost, stating that the urgency of the project would not permit the time delay caused by such a review. The Chairman of the SAC Procurement Committee in May 1976 approved the A-E contract but noted that negotiation of the contract was considered unsatisfactory and not in accordance with regulations. He noted the fact that the Malmstrom Procurement Office entered into negotiations prior to the receipt of the civil engineer's cost estimate

for A-E services, that the CE cost estimate itself was vague and "manifestly unsatisfactory," and that a request for a review of the A-E's cost proposal should not have been waived. A Malmstrom procurement representative, in a memo for the record, noted that procurement of A-E services was conducted under "unusual circumstances." He stated that Air Force and SAC Headquarters were working with the A-E in setting up a schedule, ignoring the procurement requirement for proper leadtime.

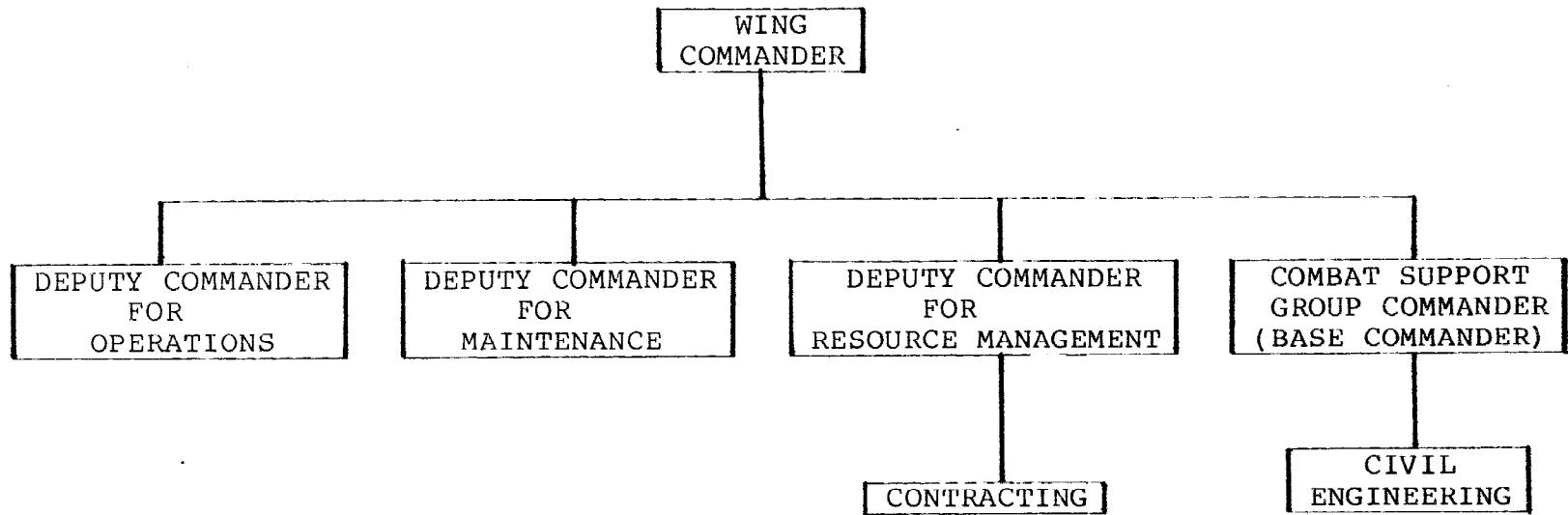
Malmstrom's procurement officer issued the invitation for bids for the construction contract on August 4, 1976, opened the bids on September 3, 1976, and awarded the contract on September 27, 1976. He approved the third and last modification to the A-E contract on September 29, 1976, and extended the A-E completion date to October 1, 1976, 28 days after bids were opened and 4 days after the construction contract was awarded.

Lack of adequate organization and staffing

Malmstrom AFB was not properly organized or staffed to administer a contract of this magnitude and complexity. Construction contracts for renovation work on family housing units are administered at the base level. The contracting officer is responsible for making all final decisions regarding the Praxis contract, and the Procurement Office is responsible for contract administration. A project engineer, assigned to base CE, supervises the project inspectors and functions as the contracting officer's technical advisor.

A project supervisor, assigned to CE, is the chief inspector, responsible for monitoring the contractor's performance on a daily basis. Inspectors note discrepancies in items needing correction and bring them to the project engineer for screening and forwarding to the contractor and contracting officer.

Malmstrom officials did not establish a separate contract administration organization to manage the Praxis contract, but instead relied on the existing base level organization. Although designated as the contracting officer's technical advisors, the project engineer and inspection force did not organizationally report to the contracting officer. CE personnel report to the base Commander while the contracting officer reports to the Deputy Commander for Resource Management. These commanders both report to the 341st Strategic Missile Wing Commander. (See chart on p. 6.) As a result, we believe any organizational disagreements or conflicts between Procurement and CE were more difficult to resolve.



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In our opinion, the lack of an effective organization helped perpetuate the poor working relationship between the two base units.

Although potential problems should have been anticipated on a project of this size, Malmstrom's base Commander did not provide enough well trained personnel for contract administration at the base. During the first year of the project, the base did not assign a full-time contracting officer to the contract. Various procurement personnel were assigned to the contract as project administrators or administrative contracting officers until December 1977 when a full-time contracting officer was assigned. According to the former procurement contracting officer assigned to the project shortly after it began, the Chief of Procurement unsuccessfully requested a full-time civilian contracting officer before the project began. As a result, as contracting officer he had to monitor the contract at the same time he managed the day-to-day operations of the base Procurement Office. Although SAC Headquarters recommended a full-time administrator with tenure, the base did not assign such an individual until over a year later.

CE personnel told us they did not have enough inspectors. The former project engineer said he never received enough trained personnel with general construction backgrounds and was continually training military personnel rotating in and out of CE as inspectors. An office secretary was occasionally used to conduct inspections and sign unit acceptance forms. According to the present project engineer, it was very difficult to get enough qualified civilian or military inspectors. The civil engineering and procurement personnel we interviewed agreed the most critical time for effective contract administration is at the initial stages of the contract work.

Poor base working relationships

An original Memorandum of Understanding, which was to serve as a working agreement between CE and Procurement, quickly became inoperative. The memorandum called for a project team approach with the project engineer and procurement officer as coproject leaders. The base civil engineer and the Chief of the Procurement Division were to jointly resolve all disputes not settled by subordinates and to coordinate at all times to ensure a unified management position was maintained. However, as early as April 1977 problems between Procurement and CE began to surface when the deputy base civil engineer began questioning the contracting officer's method of accepting Praxis' work.

Disputes between these two Malmstrom components did not foster a unified management approach to contract administration. Civil engineers often tried to obtain correction from the contractor on an item, only to be overruled by the contracting officer when he determined the work was outside the scope of the contract or the work had been previously accepted. The contractor refused to accomplish any corrective actions he felt were outside the scope of the contract unless directed by the contracting officer.

Air Force desire to keep project going

Although many problems with the contractor surfaced during the course of the contract, Malmstrom Procurement and Command officials believed the project should be completed according to the contract. Civil engineer inspectors tried to stop what they believed to be faulty work. Base officials, however, were concerned about the possible effect terminating the contract would have on families and believed any alternative means of completion would ultimately cost the Government more money.

INSPECTION AND ACCEPTANCE SYSTEM NOT EFFECTIVE OR WELL DOCUMENTED

The base Procurement Office did not properly monitor the contractor's work. The use of an important inspection record was terminated. Documentation of inspections was confusing and incomplete and not all inspections included CE personnel. Praxis often complained that CE inspectors were overzealous and believed they required a more stringent standard than that normally acceptable for renovation work. CE personnel, on the other hand, believed their inspectors were not overzealous, alleging instead that Praxis' substandard work was the cause of the numerous deficiencies cited. The method of accepting the contractor's exterior work was never properly addressed. As a result, the Air Force has formally accepted only about 63 percent of the exterior work.

Use of inspection record terminated

The contracting officer dropped a requirement for documentation of contractor work performance at key points. Air Force Manual 89-25 recommends that an inspection record with established checkpoints be used during the work to ensure that work is properly done in the required sequence. Such a record, for example, could require inspection of insulation in a wall before it is covered. The contracting officer dropped the form after a few weeks' use, claiming it was unnecessarily delaying the contractor. He cited the requirement

in the contract that Government inspectors should not unnecessarily delay the contractor's work. Such a form would allow for the prompt detection and reporting of discrepancies during the work. The lack of such a record, we believe, created the potential for missing discrepancies which could be covered over by subsequent work.

Documentation of inspections often inadequate

We found documentation of followup inspections for off-base housing units to be confusing and incomplete. Corrected items noted during followup inspections were to be checked off. The contracting official initialed discrepancies he accepted that were not corrected. However, the documentation did not show all persons present at the followup inspections or who actually checked the items off. Our observations of six units after all inspections had been conducted revealed many discrepancies still existing that were checked off and many items not checked off that were corrected. For example, we noted a new kitchen wall that was loose at the bottom; exhaust fan ducts that were not properly installed; an electrical outlet that was loose; and sheetrock and vinyl wall trim and molding that were all cut too short, sometimes not meeting the floor or ceiling. Each of these items, however, was checked off as corrected. We asked the inspectors about this but they had no explanation.

CE inspectors not involved on some inspections

Although designated as the technical advisors of the contracting officer, CE inspectors were not present at some inspections. The base Commander temporarily assigned a lieutenant recently graduated from the Air Force Academy with an engineering degree to assist with inspections.

The lieutenant conducted some followup inspections without civil engineers. In addition, a CE secretary conducted some inspections with a representative of the contractor, again without civil engineers present. The secretary actually signed the acceptance form for some units.

Inspectors accused of being overzealous

Praxis officials contended that CE inspectors were overzealous in their inspections and caused the contractor unnecessary and costly delays. They noted 600 pages of discrepancies for exterior work as an example of harassment and overzealous inspections. They said the inspectors were often

concerned with items hard to detect, such as poor tape jobs around lights, but seldom checked the operating condition of dishwashers, disposals, and fans. In addition, they claimed Air Force inspectors would cite deficiencies the contractor was not responsible for, such as cracks on a ceiling not covered in the contract documents. Contractor officials said a basic problem was that contractor personnel were trying to work with CE inspectors who, in Praxis' view, did not understand the various construction trades.

Former and present CE officials believe the inspectors were not overzealous. The former project engineer said that, at the start of the project, the Government inspectors were very lenient about citing deficiencies. He said they later may have occasionally gone too far but, for the most part, did not deviate from their normal inspection process used on other construction projects. The present project engineer also believed the inspectors were not overzealous. He said that, although an inspector may have occasionally cited some discrepancies in too much detail, the real problem was poor contractor performance. According to the present project engineer, the previous Wing Commander for Resource Management at Malmstrom suggested to Headquarters SAC personnel that they conduct an evaluation of CE's inspection procedures on the contract to investigate the allegations of overzealous inspections. The Headquarters SAC personnel, according to the project engineer, replied that such an evaluation would be inappropriate.

In our opinion the inspectors occasionally conducted inspections which cited too much detail, but most of the conditions we reviewed should have been identified and corrected.

Acceptance of exterior work not clear

A schedule for accepting exterior work was never established. Although the contractor believed he was to accomplish interior work apart from exterior work, neither the contractor nor Air Force officials were certain as to when such items as siding, crawl spaces, sidewalks, and garages would be inspected for acceptance. Although the contractor submitted schedules on the acceptance of living unit interiors, no overall schedule was made on exterior work, which represented about 46 percent of the total amount of the project.

In February 1979 the contracting officer requested that CE conduct inspections of siding, crawl spaces, and other exterior areas. About 600 pages of discrepancies were noted from inspections in February, March, and April and given to the contractor. The contractor returned them with a letter

stating that beneficial occupancy and use of the areas by the Air Force were instituted in most cases over 1 year before, that the contractor had already received payment for completion of the work, and that this constituted an implied, if not "specific," acceptance on the part of the Air Force. Although the Air Force has made no formal acceptance of all exterior work, the contracting officer has requested a legal review of the problem. As of September 14, 1979, the Air Force had paid the contractor about 98 percent of the contract amount plus modifications, although he had completed only about 93 percent and the Air Force had formally accepted only about 63 percent. In commenting on the draft of this report, Air Force officials stated that their latest progress report of December 17, 1979, shows completion at 98.8 percent.

Acceptance of interior work

The Air Force contracting officer accepted all unit interiors even though the Air Force CE inspectors believed some work discrepancies still existed. The contracting officer said that he took beneficial occupancy on some units because of the desire to move families back into the units as soon as possible.

On November 24, 1978, 1 day prior to the scheduled contract completion date, the contracting officer, after consulting with an assistant staff judge advocate, determined that the Air Force could not assess liquidated damages because the contract was substantially completed. This decision was supported by both the local legal staff judge advocate and a trial attorney from the Air Force Trial Attorney Office at Wright-Patterson AFB, Ohio. The trial attorney stressed that any liquidated damages claimed would be dismissed by the Armed Services Board of Contract Appeals and that a policy of reasonableness was preferred. He reasoned that the Air Force had taken possession of most living units and allowed military personnel to occupy them (beneficial occupancy). However, the decision did not include a determination of how much of the total work (both interior and exterior) had been formally accepted.

DECISIONMAKING ON CONTRACT MODIFICATION DID NOT CONFORM TO PROCUREMENT REGULATIONS

Decisionmaking on contract modifications did not conform to procurement regulations. File documentation was insufficient for many modifications to establish an audit trail. The contractor was apparently permitted to submit price quotes as the basis of negotiating four modifications with total changes

valued by Government estimators at about \$214,000. Legal and other required reviews of proposed contract changes were not always performed. CE involvement in contract decisions was minimal in later contract changes.

Required cost estimates not in file

File documentation of 11 contract modifications did not include required Government or contractor cost estimates. Of these, 10 were described as no-cost changes although changes in the scope of the contract work were made. The lack of documentation supporting these modifications precluded our review of the fairness and reasonableness of the pricing of the offsetting changes.

We found the magnitude of work scope changes made by these 10 modifications difficult to judge. Neither detail contractor nor Government cost estimates were in the files. Air Force auditors, reporting on their review of this contract in October 1978, stated that:

"Without preparing detailed cost estimates, it is difficult to determine that proposed additions and deletions to a contract are equal. The question is raised as to whether the government surrendered an amount equal to the amount that it won in the negotiation process. The potential exists for the government to lose a material amount in an undocumented negotiation."

The Air Force auditors' statement remains a valid one. Because of the lack of documentation, we cannot express an opinion on the fairness and reasonableness of contract price changes.

The contracting officer did not require the contractor to prepare a cost estimate in the detail necessary to meet procurement requirements for sufficient documentation. Government cost estimates are not required for contract changes valued at less than \$25,000. However, the contract clause taken from procurement regulations, covering price breakdowns for modification proposals, requires the contractor to furnish a price breakdown in sufficient detail to permit an analysis of all material, labor, equipment, subcontract, and overhead costs, as well as profit, to the satisfaction of the contracting officer. One example in which contract documentation failed to meet this requirement was a modification deleting the requirement to disconnect, store, and reinstall Government-owned refrigerators and ranges. However, the modification added the requirements for insulation in

some outside walls, edging for certain acoustic walls, and additional felt building paper to provide a seal around windows, doors, and joints. There were no cost estimates to compare these changes. In another example, a modification covering many changes included the deletion of a four-plex garage and the enlargement of other garages. Although changes were necessary in the details of various garages, the documentation included no cost estimates for comparison.

We noted a similar lack of documentation in all 10 no-cost modifications. As a result, there is no assurance that the Government received adequate consideration for the work deleted by the changes.

Contractor permitted to
negotiate changes without
required support

Four modifications were apparently negotiated using contractor price quotes and/or Government cost estimates. Price quotes submitted by the contractor did not meet the requirement of the contract clause covering price breakdowns for modifications. These modifications included total changes of about \$214,000 according to negotiated amounts or Government estimates. In the words of the October 1978 Air Force audit report:

"Failure to secure cost proposals from independent contractors places undue reliance on government prepared cost estimates."

One modification with total changes of about \$128,000 based on Government estimates lacked contractor cost estimates. For modifications involving total changes (additions plus deletions) equal to \$100,000 or more, the contracting officer is supposed to obtain contractor cost or pricing data certified as being accurate, complete, and current. Also, a field pricing report on the contract price proposal is normally requested by the contracting officer, unless the officer determines available information is adequate, in which case the contract file must reflect the reason for the conclusion. However, on the modification cited, the file contained no contractor cost estimate, no field pricing report, and no explanation for the lack of this required support.

Required legal reviews
not always performed

The base Procurement Office failed to obtain legal reviews on six modifications. A SAC procurement regulation

requires a legal review of all modifications exceeding \$10,000. The regulation does not state whether this limit covers the amount of the total changes or the net change. The former contracting officer involved in the project did not believe a legal review was required when both parties agreed upon the contract change and the net increase was less than \$10,000. According to the present contracting officer, SAC officials recently said that, due to ambiguity, the regulation will be revised in the near future. Even if a legal review was considered to be required only on net changes over \$10,000, the former contracting officer failed to meet the requirement on one modification which had a negotiated net increase of \$18,628. If a legal review was required on all modifications with total changes exceeding \$10,000, the regulation was violated in the administration of six modifications with total changes ranging from about \$13,000 to over \$127,000, according to Government estimates.

We believe that modifications involving individual changes valued in excess of \$10,000, whether for additions or deletions, should be reviewed from a legal standpoint. Without a legal review, questions may be raised later concerning the modification's legal sufficiency--questions the legal review could have helped resolve or preclude.

Base CE advice
not used in contract decisions

Base CE personnel said the contracting officer made contract decisions without CE input. In reviewing the file documentation, we found evidence that CE personnel were present during most of the negotiations of early modifications. However, negotiation records of the last modifications, beginning with modification 30, show a conspicuous lack of CE personnel in attendance and include correspondence showing CE's disagreement with the contracting officer's actions. The contracting officer, however, consulted with CE during adjournments he called in the negotiations. The details of several such negotiations and disagreements follow.

One item on a modification changed the design of a patio fence. CE and the contractor agreed to a no-cost change which was formalized by a contract modification. The contractor then elected to use a lower cost design than the one agreed upon. CE estimated that a \$3,738 credit was due the Government because of the use of the new design. The contracting officer refused to negotiate the reduction.

On another modification, Procurement acted before receiving CE's cost estimate. The change involved deletion of work

on four garage driveways. On October 10, 1978, Procurement reviewed the contractor's proposal for a \$6,806 credit to the Government. The following day, October 11, 1978, Procurement decided it would be in the best interest of the Government to accept the contractor's proposal. CE submitted a cost estimate on October 16, 1978, showing \$13,015 was due the Government from the deletion. The contracting officer disregarded the CE cost estimate because he considered the agreed-upon change already finalized.

Another modification item increased the contract cost by \$2,530. The contractor proposed an increase of \$2,622 for heating thermostats in off-base housing on July 20, 1978. CE's project engineer informed Procurement the thermostats were already required by the contract specifications. The administrative contracting officer directed the contractor to install new thermostats. The contracting officer then determined that, by this act of the administrative contracting officer, the Government had accepted the contractor's proposal. He agreed to increase the contract by \$2,530 based on the actual cost of the new thermostats. Since new thermostats were called for in the specifications and already included in the contract price, the contractor was paid twice for their installation.

One modification included revised interior plumbing in on-base units. CE estimated that the Government was due a credit of \$13,268 for the change, and the contractor submitted a proposal for a price increase of \$4,342. In the memorandum of negotiation, Procurement declared the CE estimate unreasonable without explaining why. The negotiation meeting was held on October 12, 1978. Present were two contractor representatives, two procurement representatives, and a Judge Advocate General Officer. No CE representatives attended. The memorandum of negotiation stated that,

"Although it was impossible to review the work performed as it was concealed by a wall, all parties concerned agreed that additional work had been performed."

The contract price was subsequently increased by \$3,275 for the revised interior plumbing.

In another instance, the contracting officer authorized the contractor to obtain additional engineering services for exterior work without a CE cost estimate, a contract modification, or a cost-sharing arrangement. The contractor, on numerous occasions, complained to the Air Force that additional engineering services were required for the outside

portion of the contract. The deputy base civil engineer recommended a cost-sharing arrangement for paying the contractor for additional engineering services rendering a benefit to the Air Force. In addition, a staff judge advocate at Malmstrom developed a methodology to be used to calculate the appropriate payment to the contractor for these services. Despite these actions, the contracting officer notified the contractor on March 30, 1978, that the best action would be to proceed with the job and handle discrepancies as they were noted. In another letter on April 14, 1978, he wrote the contractor:

"I am aware that you are unable to proceed with the outside portion of this contract until complete engineering services are performed. Based on the above you are authorized to obtain the engineering services required to complete the project in a timely manner."

Although technical and legal advisors recommended methods for paying the contractor for the additional services, the contracting officer failed to follow this advice. He did not issue a contract modification or request a CE estimate for the cost of the engineering work. We believe the contracting officer should have had an estimate for the cost of the additional work and negotiated a contract modification before authorizing the contractor to obtain further engineering services.

Procurement regulations covering the contracting officer's use of specialists state in part that:

- "The contracting officer shall avail himself of all appropriate organizational tools such as the advice of specialists * * *."
- "To the extent services of specialists are utilized * * * the contracting officer must coordinate a team of experts * * *. He shall not, however, transfer his own responsibilities to them."
- "When the contracting officer does not adopt audit or other specialist recommendations that have particular significance on the contract price, comments should be included in the record of the negotiation."
- "Whenever it becomes apparent to the contracting officer that the negotiations will require the resolution of complex problems which involve items significant in amount, he shall request attendance

by audit or other representatives at the negotiation meeting."

The actions outlined above did not properly incorporate analyses by engineering specialists and did not explain differences between Government cost estimates and negotiated amounts. In addition, the contracting officer did not have engineering specialists present during negotiations involving complex problems having a significant impact on contract price. Since this change added about \$75,000 to the contract, we believe it was significant enough to warrant the use of technical specialists. As a result, the Government was at a disadvantage in negotiating these changes, and the possibility existed that the Air Force paid more than it should have for the goods and services provided.

INADEQUATE CONTRACT ADMINISTRATION

As a result of the inadequate contract administration, as of November 13, 1979, many discrepancies and incomplete work still exist, primarily in areas external to the living units. Air Force civil engineers have estimated it might require almost \$1.9 million to correct these discrepancies. The contractor contends that the contract specifications and drawings are inadequate. He also says he has frequently performed beyond the scope of the contract documents and has suffered unnecessary Government-caused delays, often without adequate monetary compensation. As a result, he has filed claims of almost \$1.9 million against the Air Force.

Types and extent of alleged contract performance discrepancies

The contractor had many problems reaching what the Air Force considered an acceptable level of performance. The Malmstrom CE inspectors frequently cited the contractor for discrepancies on both unit interiors and exteriors. Most of the items cited on inspection reports for interiors were for poor workmanship. Some items were

- tape and paint jobs done poorly,
- caulking done excessively,
- doorjams and sheetrock cut short,
- nails in kitchen cabinets exposed,
- cabinet doors warped,

- counter tops not secure,
- electrical outlets loose,
- tub enclosures not secure,
- base on new wall not fitted at corner or flush to wall,
- new wall not secured at base or bowed,
- towel bar not secured, and
- units not cleaned.

While we did not make a statistically valid sample, and therefore cannot estimate the total numbers of each type of discrepancy, we did look at enough units to satisfy ourselves that the discrepancies reported did in fact exist. It is our opinion that the contractor could have corrected some of the discrepancies with little effort. Such items as exposed nails, loose electrical outlets, and loose towel bars do not require a great deal of effort to correct.

Many of the interior items cited were, according to the inspectors, the result of poor workmanship. The 10 photographs at the end of this report show some of the discrepancies cited. For example, inspectors cited the contractor for new wall molding not matching the existing molding (fig. 1), new doorjambs cut too short to meet the existing floor (fig. 2), and holes cut too large in some newly installed vanities below the sink (fig. 3). Although the contractor has corrected many of these interior discrepancies, some were still not corrected at the time of our visit.

Over 600 pages of discrepancies have been noted covering inadequate or incomplete exterior work. These discrepancies involved crawl spaces, garages, patios, fences, sidewalks, and siding. Most have yet to be corrected. Discrepancies cited on inspectors' reports include:

Crawl spaces

- Insulation is inadequate.
- Plumbing is inadequate.

Garages

- Sheetrock is damaged.

- End walls are not secure.
- Siding is not properly nailed and is coming apart.
- Shingles are damaged or not aligned.
- Concrete finish is unacceptable.
- Gutters do not properly drain.
- Doors are not painted and do not operate or lock properly.
- Electrical wiring is not covered by paneling or encased in conduit.

Patios/sidewalks

- Concrete is cracked and chipping away.
- Concrete step footings were not installed.
- No vapor barriers were installed.

Fences

- Fenceposts are loose; fence is leaning or bowed.
- Fence material is warped or cracking.

Siding on housing units

- Siding is badly bowed and too short.
- No building felt was installed.
- Soffit vents were not provided.

General exterior

- Water hydrants were apparently damaged by the contractor.
- Landscaping and seeding were not completed.

We examined units to satisfy ourselves that the conditions did exist, but we cannot estimate the total number of discrepancies for the entire project. We saw numerous discrepancies on newly constructed garages. Much of the siding was coming apart (fig. 4), and shingles did not extend over

the edge of some roofs (fig. 5). Electrical wiring was not covered with paneling or encased in the required conduit (fig. 6), and weathered material was installed (fig. 7).

We noted discrepancies with newly constructed fences. Some were leaning (fig. 8) primarily, according to the inspectors, because of inadequate anchoring of fenceposts in cement (fig. 9). We also saw fence material splitting and coming apart (fig. 10). Again, our use of the term "discrepancies" is not intended as a legal determination of the contractors' performance to contract specification.

Costs to correct remaining discrepancies

We asked Malmstrom's civil engineers to estimate the amount of funds required to correct all remaining discrepancies, including work already accepted by the Government. Their preliminary analysis disclosed additional costs ranging from \$1,257,840 to \$1,886,760 to correct existing discrepancies and to finish work they say is required by the contract. The Government is authorized to withhold or retain a portion of the contractor's progress payments until final completion and acceptance to protect the Government's interest. As of November 13, 1979, the Air Force had retained \$149,726, or about 2.6 percent of the total contract amount. The preliminary CE estimate of the cost to correct discrepancies would be at least 8 times and possibly over 12 times the amount retained. Of the additional cost, about \$95,600 is needed for completion of unit interiors the Air Force has already accepted.

CHAPTER 3

AIR FORCE INSPECTOR GENERAL'S REPORT--

RIGHT PROBLEMS, NO CAUSES

A recently completed Air Force Inspector General (IG) inquiry identified problems with the renovation project. Based upon a congressional request, the Air Force IG completed an inquiry in March 1979 into allegations that the Air Force had accepted substandard work on the renovation project. While the final report of the inquiry correctly summarized some of the problems encountered in the project, it did not cite the causes of these problems or offer recommendations.

This final report also separated the contractor's performance or work in the Wherry Housing units and the more general contractual requirements to provide an adequate inspection system, to protect material delivered to the jobsite, and to schedule units for return to the Air Force. Regarding the physical work in the units, the report stated that,

"* * * in the final analysis the contractor either met the minimum quality requirements or provided other consideration to the Government for the refurbished units."

However, regarding the other general contractual requirements, the report stated that the contractor never did comply and stated further that,

"* * * adequate consideration was not obtained for an inadequate inspection system, improper protection of materials, or failure to provide adequate schedules for return of units to the Air Force."

The report also did not comment on the adequacy of the work substitution or monetary contractual adjustments agreed to between the contracting officer and the contractor. It did state that either minimum quality work (in the unit) was presented or adjustments were made. It also stated that no adequate consideration had yet been sought for the more general contractual requirements. In our opinion, the lack of adequate documentation related to the contract modifications makes it impossible to determine the adequacy of the consideration provided by the contractor.

The following summarizes the IG's findings or comments and our evaluations.

INADEQUATE CONTRACTOR INSPECTION SYSTEM

The Air Force IG report stated, "The contractor never did * * * provide adequate inspection of his own work * * *." According to the IG, the contractor had "inspectors" and an "inspection system," but the Air Force, in effect, performed the contractor's quality inspection function.

Although a contract clause specifically required Praxis to maintain an adequate inspection system and to maintain and furnish the Government with adequate records of such inspections, the Air Force failed to enforce this clause. Although the contracting officer requested inspection records in February 1977, no such records were received or reviewed. The contracting officer did not attempt to obtain these inspection records again until July 1979. At the time of our review, no records had yet been received or reviewed, although in commenting on this report, the contractor contends that such records were furnished. Contractor officials were unable to furnish us with any inspection records when we asked for them during our visit to their office. CE inspectors cited the contractor for numerous discrepancies from the time they inspected the first units in 1977. The contracting officer should have enforced the contractor inspection clause at the first indication that his inspectors were performing the inspection function of the contractor.

IMPROPER PROTECTION OF MATERIALS

The IG team also noted that the contractor failed to provide proper protection for materials delivered to the job-site. CE inspectors documented numerous instances of the contractor's installation of wet sheetrock, damaged siding, and other damaged material. The inspectors claim the contracting officer told them they could not stop the contractor from installing bad material but would have to wait until the final inspection, at which time they could cite the contractor. A contract provision required the contractor to promptly segregate and remove rejected material from the premises. Proper contract administration would have ensured that these materials were either not used or that the Air Force received adequate consideration.

INADEQUATE CONTRACTOR SCHEDULE

The Air Force IG report also cited the contractor for failure to provide adequate schedules for the return of housing units to the Air Force. A contract provision required the contractor to submit a schedule to the contracting officer showing the order of work and completion dates.

It also required the contracting officer to take appropriate actions to keep the contractor on schedule. According to CE personnel, the contractor frequently changed his schedule of finishing units, causing confusion for inspectors as to when a final inspection would be made and imposing hardships on housing occupants. According to contractor officials, the Air Force's contract administration continually affected their schedule. The Air Force, they said, provided them with inadequate specifications and drawings and would not accept the finished units in a timely manner so that new units could be turned over to the contractor. This, according to contractor officials, caused them scheduling problems since they could not get new units in order to keep their work crews fully productive.

We believe proper contract administration and enforcement of the appropriate contract provision could have prevented or corrected this schedule problem. In addition, if the inspection checklist noted in chapter 2 had been effectively used, acceptance of the units may have enabled the contractor to maintain an adequate schedule and allowed the Government to accept the units as scheduled.

CHAPTER 4

KEY OFFICIALS CRITICAL

OF CONTRACT ADMINISTRATION

Comments we received from key officials connected with the renovation project confirmed the contract administration problems cited in chapters 2 and 3 and supported the need for changes in the way the Air Force administers a family housing renovation contract at base level. We interviewed contractor personnel, past and present contracting officers administering the contract at Malmstrom, the base civil engineer during most of the contract period, the past and present project engineers, and a representative of the A-E firm responsible for the design specifications used on the construction contract. The following sections of this chapter summarize their comments, conclusions, and suggested recommendations.

THE CONTRACTOR, PRAXIS LIMITED

Praxis officials cited the basic problems on the Wherry project at Malmstrom as inadequate specifications and drawings and the lack of qualified or experienced Air Force personnel.

Inadequacy of contract documents

Contractor officials claim the contract specifications and drawings did not adequately reflect the actual conditions existing inside and outside the housing units at Malmstrom. They said contract documents did not disclose the "crookedness" of the buildings nor the actual slopes, elevations, and drainage patterns of the land. They said they were not aware of these inadequacies at the time of their bid and as a result were continually directed by the Air Force to work outside the scope of the contract, frequently without adequate monetary compensation. Praxis officials said the schedule for exterior work was never properly clarified by the Air Force; and, once the work was started, "piecemeal engineering" had to be conducted, which caused Praxis unnecessary and costly delays. As a result of this "additional work," Praxis has filed claims of about \$1.9 million against the Air Force.

Lack of qualified Air Force personnel

According to contractor personnel, the Air Force inspectors were not qualified to inspect all aspects of a major construction contract such as the Wherry renovation project, and the contracting officer lacked an adequate construction engineering background. Praxis officials said Air Force

inspectors often harassed contractor personnel by taking a long time to conduct inspections. They said inspectors often cited cleaning discrepancies when in fact the Air Force did not include in its estimate any amount for contractor cleaning under the contract. Contractor officials suggested that most of this harassment might have been due to local union influence since Praxis is a nonunion contractor. They said the claim of "poor workmanship" was raised frequently after similar quality work had already been accepted. The Air Force organization, according to contractor officials, is not conducive to good contract administration in those instances in which qualified and knowledgeable people are not assigned to the key positions.

The contractor's recommendations

Contractor officials believe the Air Force system of contract administration is not effective. The CE inspectors at Malmstrom, they claim, were not properly qualified, were overzealous, and were frequently at odds with the contracting officer, who had no construction background. They see the need to eliminate this 'dual-control' aspect of Air Force contract administration. They made the following recommendations as possible options:

- Require the Air Force to incorporate contract administration methods similar to those used by the Army Corps of Engineers, in which the inspectors actually report to the contracting officer.
- Ensure that the contracting officer has a good construction background in order to rationally analyze inspector recommendations.
- Use the A-E as an inspector on the project so that inadequate specifications or designs can be easily and quickly corrected.

FORMER CONTRACTING OFFICER

According to the former Malmstrom AFB contracting officer for the Praxis contract, the A-E contract and the award of the construction contract were rushed, and the Air Force lacked an adequate organization and adequate base level staffing to administer a contract of this size and complexity. Although he was not involved in the A-E contract or the award of the construction contract, he felt both were completed in too short a time period for a \$5.5 million construction contract. He said the process was compressed in time because of the desire to obligate funds that would otherwise be lost.

Lack of adequate Air Force staffing

According to the former contracting officer, there was no full-time contracting officer for the first year of the contract. This, he said, put a strain on the Procurement Chief who had to monitor the contract and run the other day-to-day operations of the office. In addition, he said some CE inspectors assigned to the contract had little experience in construction. He said the CE project engineer should not have been the same person who approved the specifications since he tended to always defend them when any question arose. He believed the fact that the inspection force reported to the base civil engineer and base Commander instead of the contracting officer hindered the effectiveness of Malmstrom's contract administration.

Former contracting officer's recommendations

The former contracting officer recommended the Air Force consider the following alternatives for similar contracts:

- Organize under a project management approach similar to that of the Army Corps of Engineers, with a full-time contracting officer who has his or her own inspection force.
- Hire an A-E familiar with renovation work for the inspection function.
- Break down the contract into smaller, more easily managed contracts.
- Determine what level of quality is expected from renovation work, especially how it should match existing work, and incorporate this into the contract.

PRESENT CONTRACTING OFFICER

According to the contracting officer at Malmstrom presently assigned to the Praxis contract, the contract was awarded too quickly, Malmstrom was not adequately staffed to monitor the contract, and inspection procedures and contractor inspection responsibilities were not clearly identified. The contracting officer said, "In retrospect, if I were to contract a project like this again I would require temporary storage buildings be erected."

Contract awarded too quickly

According to the present contracting officer, the contractor was very concerned about getting the contract and being paid, while the Air Force was concerned about when the contractor could begin work. The concern, she told us, was to get the contractor started so that units could be quickly completed to help alleviate a very critical housing shortage at Malmstrom.

Lack of adequate staff

Although a procurement representative at Headquarters SAC recommended in June 1976 that a full-time civilian be selected to administer the Praxis contract at Malmstrom, the present contracting officer said Malmstrom officials had difficulty in recruiting a qualified civilian in the local area, and the Air Force could not or would not provide a military contracting officer for the contract. She said it was not until December 1977, over 1 year after the renovation project was started, that a full-time contracting officer (military) was assigned to the Praxis contract.

Inspection procedures not clearly identified

According to the contracting officer, it was never made clear how the units would be inspected (that is, by partial or complete units), who would request the inspections, and who would submit inspection schedules. In addition, she said the contractor's own responsibilities for inspections as required by the contract were not properly stressed.

Storage of contractor materials

The contracting officer said the contractor did not adequately store or protect much of the material he delivered to the site. Although provisions were made, she said, to allow the contractor to use empty garage stalls for storage, the contractor did not do it. The contract specifications in most sections cover storage.

Present contracting officer's recommendations

The present contracting officer for the Praxis contract made the following recommendations:

- More time should have been taken for the A-E design work and for the required procurement actions prior to the award of the construction contract.

--The Air Force should have ensured that a full-time contracting officer (civilian or military) was assigned to a contract of this size and complexity at the start of the project.

--Time should have been taken before the contract was awarded to discuss inspection procedures so that the contractor and the Air Force inspectors clearly understood their inspection responsibilities and the specific Government inspection procedures that would be followed.

--To preclude any storage problems, the contract should have required the contractor to erect temporary buildings for the storage of materials.

THE BASE CIVIL ENGINEER

According to the base civil engineer assigned to Malmstrom from July 1977 until September 1979, the Air Force did not recognize that the Wherry renovation contract exceeded the normal capabilities of the base. He said Malmstrom did not have a strong leverage point with the contractor since the base had no separate dedicated team, but rather worked within the existing CE and Procurement Offices. He also said the contractor had problems with workmanship, and the Air Force did not have enough Government inspectors to keep track of the contractor at all times.

Base civil engineer's recommendations

The base civil engineer recommends for future projects the establishment of a separate dedicated project team reporting to the base Deputy Commander for Resource Management. The team should be staffed with a sufficient number of inspectors to adequately monitor the contractor's work.

FORMER PROJECT ENGINEER

According to the former project engineer assigned during most of the project work, the Air Force system of administering contracts is not effective, the Air Force did not provide enough qualified personnel at Malmstrom to monitor the Praxis contract, and the Air Force did not properly require a good contractor quality control effort.

Air Force contract administration
not effective

According to the former project engineer, the former contracting officer failed to properly use the technical expertise of the civil engineers. He said the former contracting officer failed to require civil engineers' presence at negotiations with the contractor or failed to consider CE cost estimates, effectively weakening the Government's negotiating leverage with the contractor.

Lack of adequate personnel

The former project engineer told us he had two civilian inspectors at the start of the project and, although he requested additional personnel, could not get enough military inspectors who were properly trained. He also stated no full-time contracting officer with an adequate construction background was ever assigned.

Lack of contractor quality control

According to the former project engineer, the Air Force actually performed the contractor's quality control inspections. He said the contract clause requiring an adequate contractor inspection system was never enforced by the contracting officer.

Former project engineer's
recommendations

The former project engineer said the Air Force contracting system for family housing renovation projects should be changed. He said the Air Force should adopt a system similar to that used by the Army Corps of Engineers so that the contracting officer would be required to have a construction background and would have construction engineers assigned to him or her as part of a project team. He also believes the Air Force should assign enough qualified inspectors to adequately monitor contractor operations. Finally, he recommends that contracting officers enforce the provisions of the contract requiring a contractor inspection system.

PRESENT PROJECT ENGINEER

According to the present project engineer, the base was not adequately staffed to handle the Praxis contract. He said the contracting officer failed to use CE expertise in contract decisions.

Base not adequately staffed

According to the present project engineer, CE did not have enough qualified inspectors during peak periods of the project. In addition, he said, there was no full-time contracting officer with a background in construction engineering assigned to the Praxis contract.

Failure to use CE expertise

The project engineer said CE representatives were not always present at negotiations with the contractor, and the contracting officer often declined to consider CE estimates of funds involved in contract changes, preferring instead to do his own estimating.

Present project engineer's recommendations

The present project engineer concluded that the base could not properly administer a contract of this size. He said his first recommendation would be for SAC or Air Force Headquarters to send a special team to Malmstrom for administering the contract, headed by a contracting officer with a background in construction engineering. If this could not be done, he would like to see a person with a knowledge of construction engineering assigned to the base as contracting officer for the project and an adequate number of qualified inspectors assigned to CE. Finally, he would establish the requirement that the contracting officer, if not construction oriented, must rely on the technical guidance of the civil engineers. He said such an improved system could be developed similar to the one used by the Army Corps of Engineers.

A-E

A representative of the Schooley Cornelius Associates, the A-E, said his firm was required to complete the design effort in a very compressed period of time and was not properly involved onsite with the Praxis contract. He said a normal A-E effort could have taken 1 or 2 more months but that the Air Force was concerned that the design work proceed as quickly as possible. He said the firm was occasionally consulted by the project engineer but never coordinated aspects of the design work with Praxis, the construction contractor.

A-E recommendation

The A-E representative said the nature of renovation work requires a special attention to specifications and designs at the field level. He recommended that a contract, like the one at Malmstrom, contain a provision allowing the A-E some "optional supervisory capabilities" during the construction phase of the contract. Even periodic supervision by the A-E, he believes, would help the Air Force ensure that the contractor's performance meets the specifications. As a minimum, he would like to see a required preaward conference between the A-E and the low bidder to discuss the specifications and drawings. Such a meeting, he feels, would allow the contractor's personnel representing the various construction trades to better understand the design documents.

CHAPTER 5

AIR FORCE, FORMER PROJECT ENGINEER,

AND CONTRACTOR COMMENTS

We provided a draft of this report to the Department of Defense, Department of the Air Force, the former project engineer, and the contractor for their advance review and comments. This section of the report presents our summarization of those comments.

DEPARTMENT OF THE AIR FORCE

We met with senior Air Force officials and obtained their comments. In general, the Air Force agrees that they did not follow sound acquisition and contract administration processes involving the Malmstrom contract with Praxis.

The most serious Air Force objection to our draft report was our criticism of the IG's report. The Air Force believes that the tone of this criticism was too harsh. They point out that the IG's investigation was of limited scope, directed toward obtaining answers only to specific questions, took only 2-1/2 days, and did not reach an overall conclusion. We changed the introductory paragraphs of chapter 3 to more accurately and objectively summarize the IG's report.

FORMER PROJECT ENGINEER

The former project engineer generally agreed with our draft report. His primary disagreement was with any suggestion that his inspectors were not qualified. He said that civilian inspectors he received were highly trained and motivated individuals. The problem was that there were not enough of them. According to him, their talents were spread too thin to perform the required inspections plus the contractor's quality control. To supplement these inspectors, military personnel were detailed to perform as inspectors. These personnel had various backgrounds and required individual training to be qualified on specific aspects of the work. A large portion of the former project engineer's time was spent training these people so they could make competent inspections. They were then supervised on their inspections by the chief inspector.

The former project engineer stated that the contractor refused to correct work that was specifically called for in the plans and specifications. He also strongly denies any

suggestion that the inspectors were overzealous or harassed the contractor. He said:

"The contractors' poor work practices and quality did not make 'poor tape jobs' hard to detect. They stood out in glowing majesty. Cracks in the ceiling or any other area to be painted were covered in the contract documents to be repainted. The contractor just didn't furnish his people with these documents to go by. It would then come to final inspection time and they would call the inspectors overzealous."

The former project engineer said the time extension for the A-E contract mentioned on page 5 had nothing to do with the housing renovation project. The Air Force had tentative plans, depending on the funds available, to provide parking lots for the housing area. The A-E was given the job of designing the parking lot. The parking lot drawings were finished on October 1, 1976, but funds did not become available and the parking lot was indefinitely deferred.

CONTRACTOR, PRAXIS LIMITED

On January 25, 1980, the general counsel for Praxis Limited transmitted a 33-page statement of comments signed by Praxis' president. We have not included those comments because they are so voluminous. The contractor agrees with our understanding and conclusions concerning the acquisition and contract administration problems at Malmstrom AFB. The contractor disagrees with our selection of adjectives to describe the results of its efforts and the end product received by the Air Force. The contractor believes that our use of such terms as "substandard," "poor workmanship," and "deficiencies" has legal significance and is better left to the determination of courts of competent jurisdiction. The contractor believes that we should amend our report to state the facts as we observed them and not render a legal conclusion that might violate its rights of due process.

We agree with the contractor that such descriptive terms reflect conclusions on our part which are better left to the courts. Whether the conditions we observed were caused by inadequate plans and specifications, as the contractor contends, or by poor workmanship, as the Malmstrom CE inspectors contend, is an issue that may ultimately require resolution in the courts. Therefore, we have amended this report to avoid any GAO description of the contractor's work in terms that might prejudice potential future litigation.

The contractor readily admits that it is not a perfect contractor and, hence, readily admits that all of the 492 units were not renovated "perfectly." Praxis admits that its work on the exterior portion of the contract is not "perfect." Praxis points out that discrepancies can be found in any project and that no contractor completes a perfect construction project. The contractor suggests that it gave the Air Force a totally functional and generally acceptable construction project and performed as a reasonable, prudent contractor would under like circumstances.

The contractor believes that we must render a decision on the adequacy of the contract documents before we comment on the adequacy of the contractor's performance. The general provisions of the contract require, by reference, that all work under this contract shall be performed in a skillful and "workmanlike" manner. Whatever the reasons for the conditions which exist at Malmstrom AFB, in our view, the end product leaves much to be desired.

The contractor provided extensive comments supporting its position that it has fully completed its contractual obligations. Much of its comments deal with technical interpretation of drawings and specifications. Since these items were specifically excluded from our scope of work, we have not specifically dealt with them.

CHAPTER 6

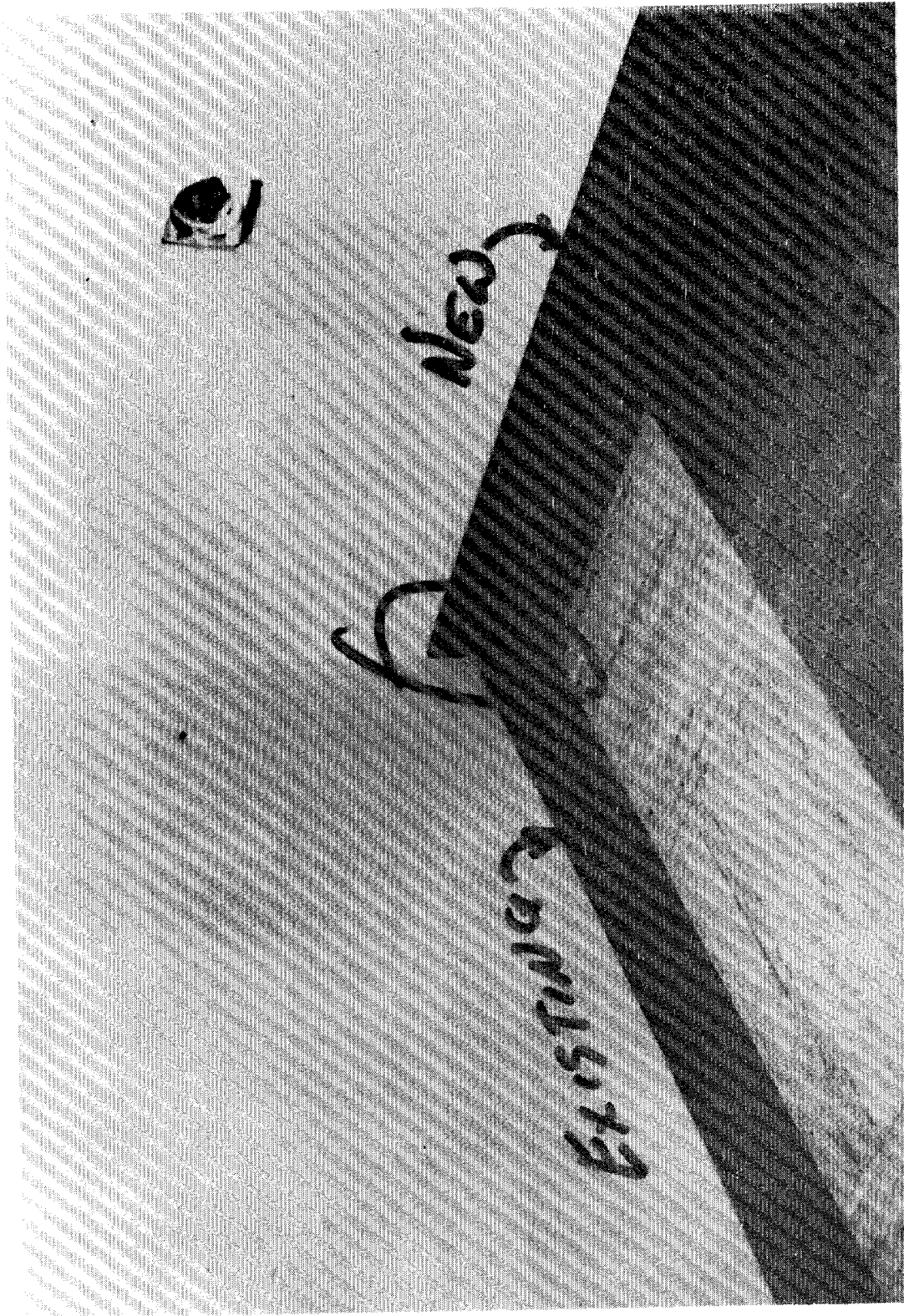
CONCLUSIONS AND RECOMMENDATIONS

The Air Force failed to adequately plan and administer the renovation contract at Malmstrom AFB. The base was assigned the responsibility for monitoring and controlling a multimillion dollar housing renovation project without an adequate management organization and without adequate staffing of key positions. The poor working relationships which developed and the lack of adherence to regulations and sound contract administration procedures reduced the Government's effectiveness in managing contract performance. As a result of inadequate contract administration, the contractor frequently had difficulty meeting what the Air Force inspectors considered an acceptable level of performance. We saw numerous examples of what the inspector identified as poor workmanship. The Air Force has estimated it could cost almost \$1.9 million to correct remaining discrepancies and complete the project. We believe most of the problems we identified could have been prevented by proper planning, contract administration, and enforcement of contract provisions. The contract administration and inspection procedures implemented did not adequately protect the Government's interests.

RECOMMENDATIONS

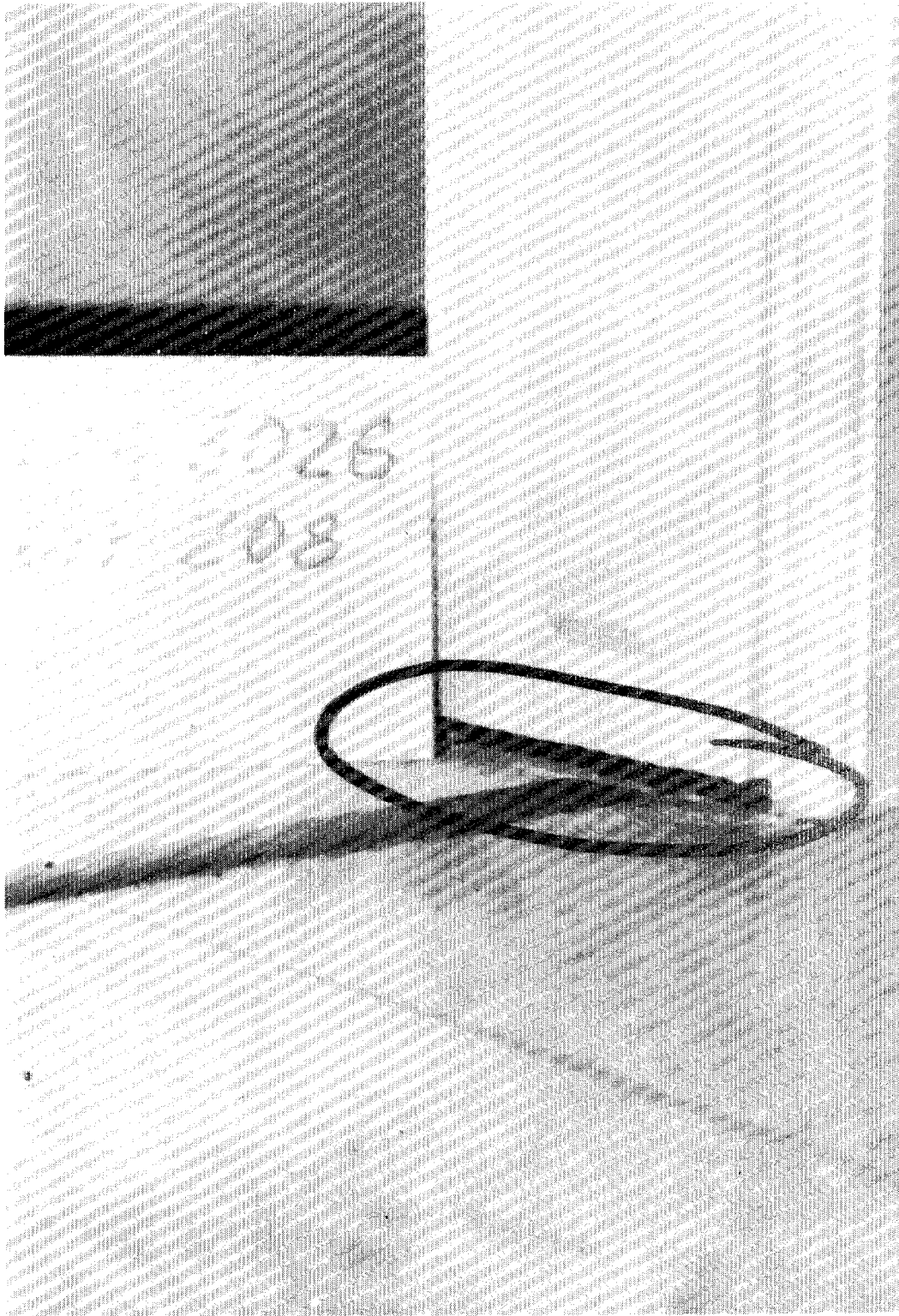
To preclude future problems similar to those experienced on the Malmstrom project, we recommend the Secretary of the Air Force see that

- an adequately staffed organization is established at the base level to administer a major housing renovation construction project,
- projects are properly planned to eliminate any yearend rush to obligate funds, and
- proper procedures and regulations are followed and contract decisions are well supported and documented with higher headquarters monitoring.



SOURCE: U.S. AIR FORCE

FIGURE 1
NEW WALL MOLDING NOT MATCHING THE EXISTING MOLDING.



SOURCE: U.S. AIR FORCE

FIGURE 2
NEW DOORJAMBS CUT TOO SHORT TO MEET EXISTING FLOORS

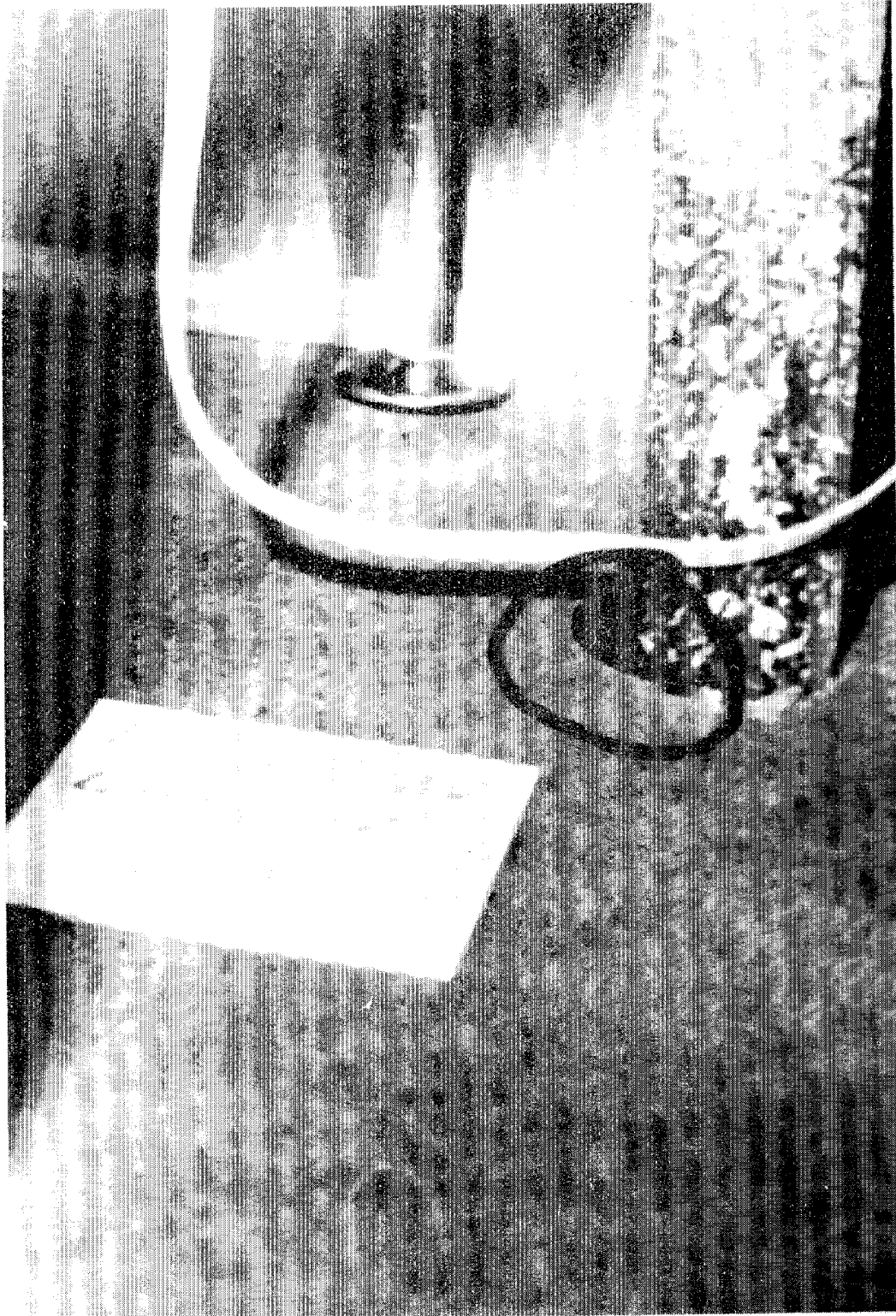


FIGURE 3

SOURCE: U.S. AIR FORCE

HOLE CUT TOO LARGE FOR DRAIN PIPE UNDER SINK ON SOME NEWLY INSTALLED VANITIES.

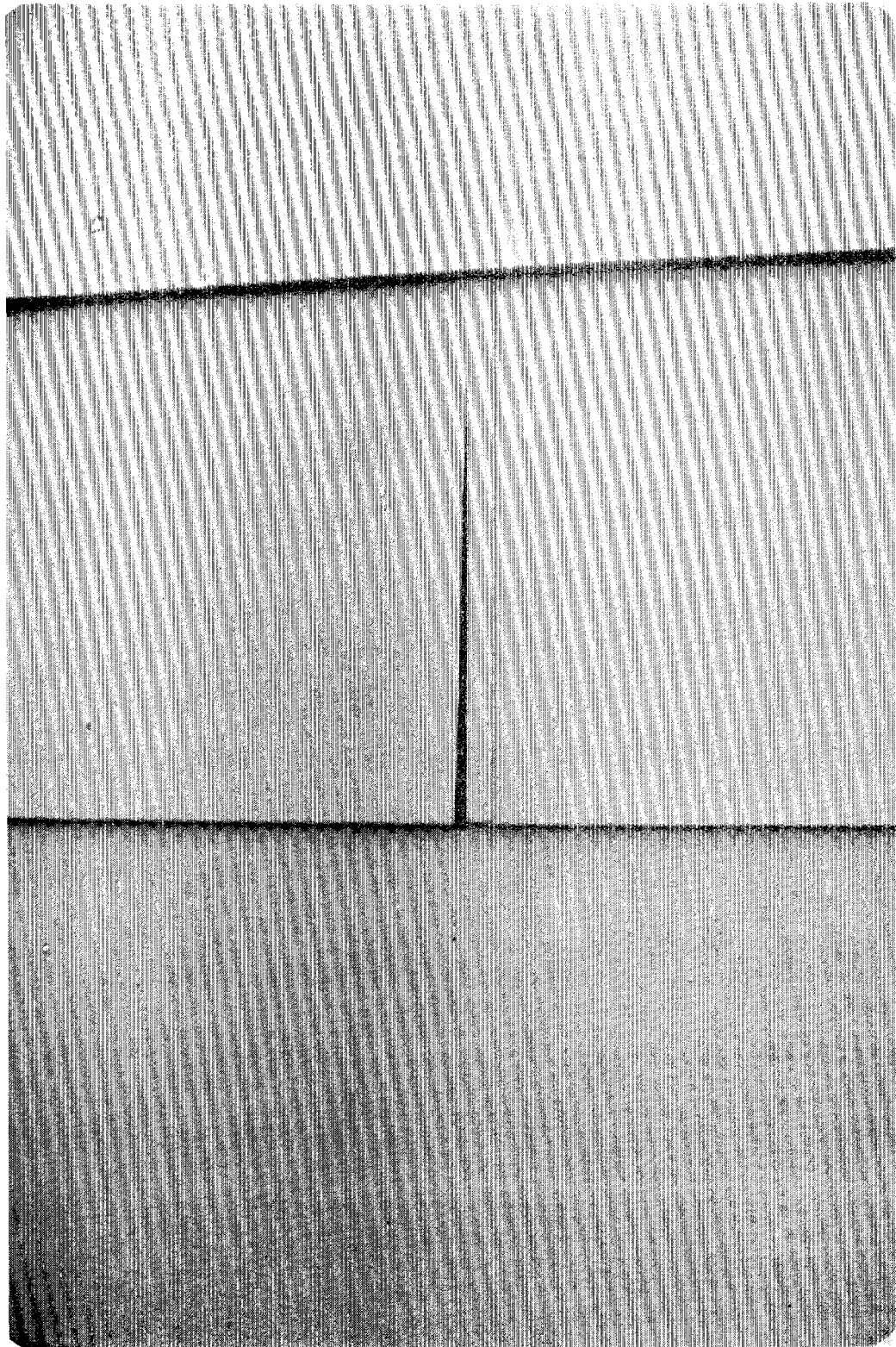


FIGURE 4
EXAMPLE OF IMPROPERLY NAILED SIDING ON NEW GARAGES.



FIGURE 5
EXAMPLE OF ROOFING SHINGLES NOT OVERLAPPING EDGES OF SOME ROOFS
ON NEW GARAGES.

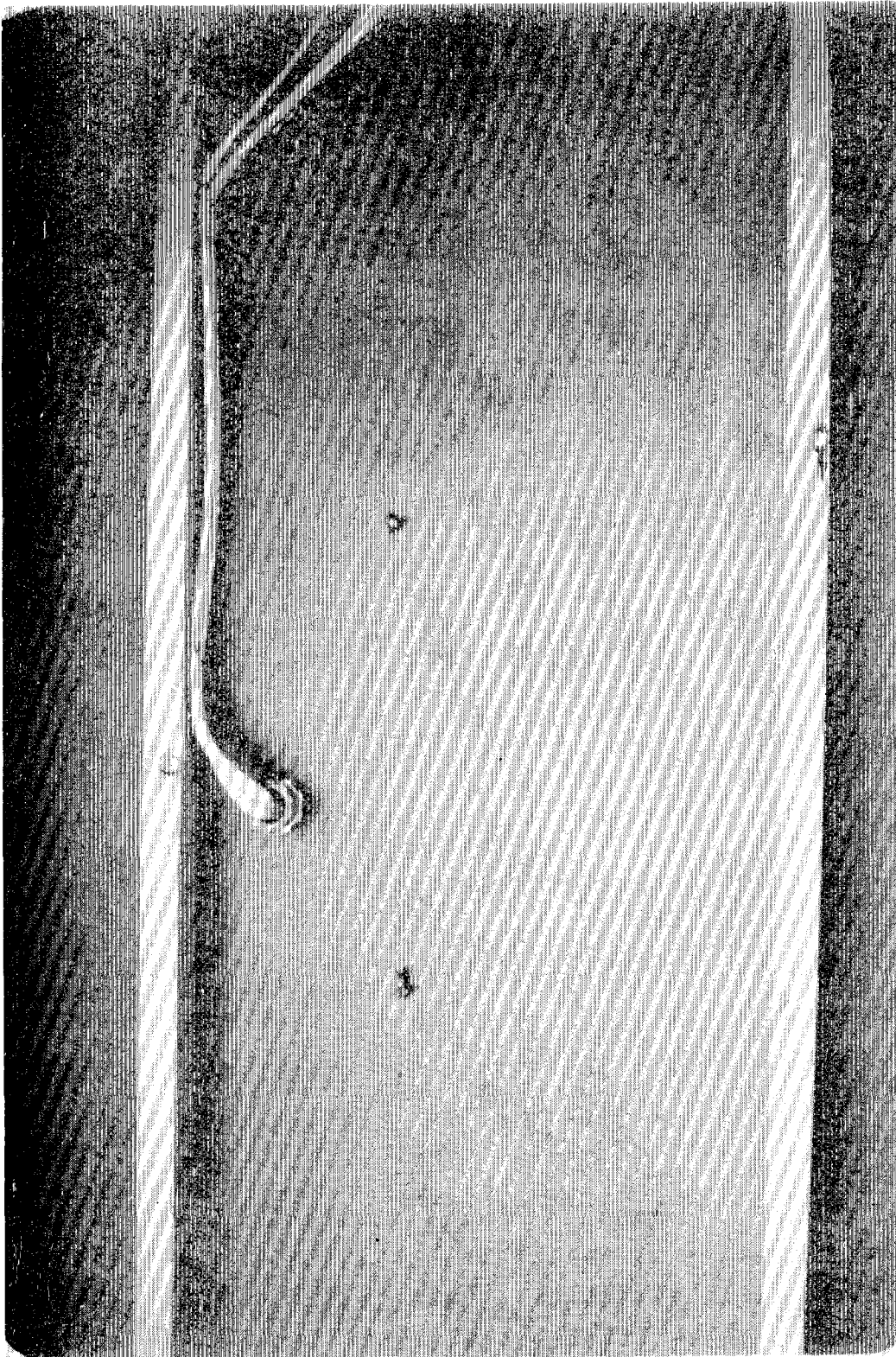


FIGURE 6
ELECTRICAL WIRING NOT COVERED BY PANELING OR ENCASED IN CONDUIT.

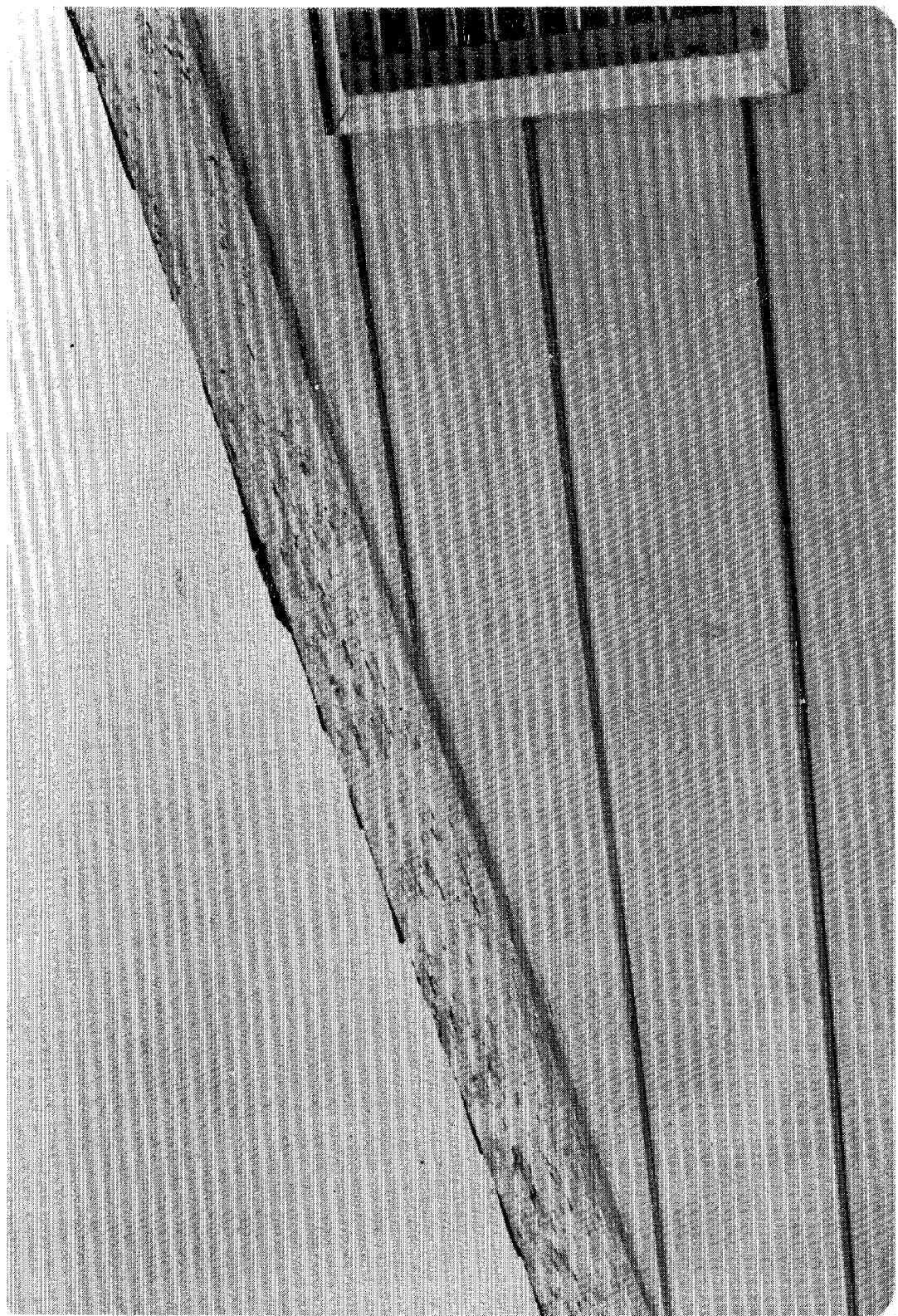


FIGURE 7
WEATHERED MATERIAL (FACIA BOARD) INSTALLED ON NEW GARAGES.

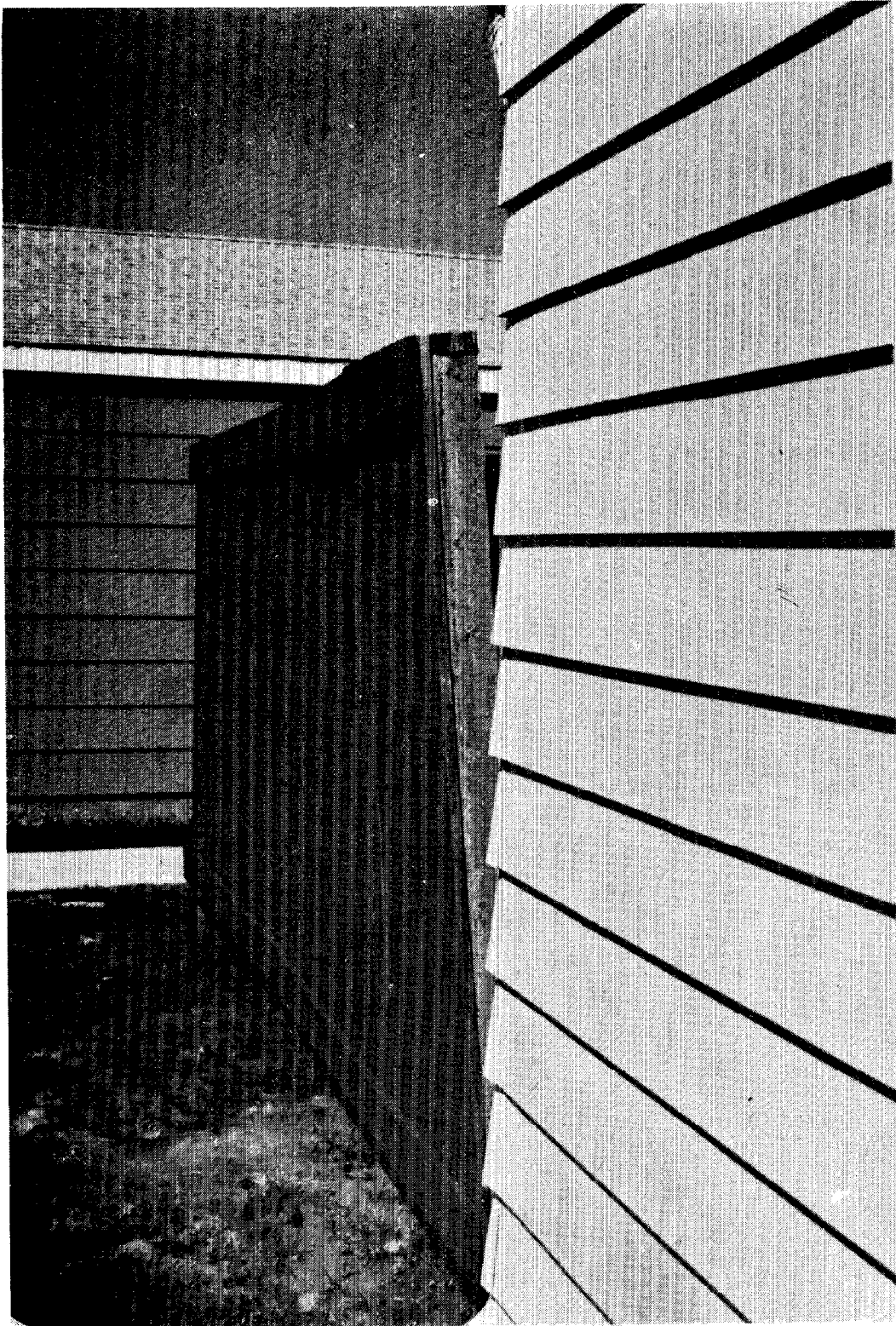


FIGURE 8
EXAMPLE OF THE NEWLY CONSTRUCTED FENCES THAT ARE LEANING.



FIGURE 9
INADEQUATE ANCHORING OF FENCEPOSTS WHICH CAUSED FENCES TO LEAN.

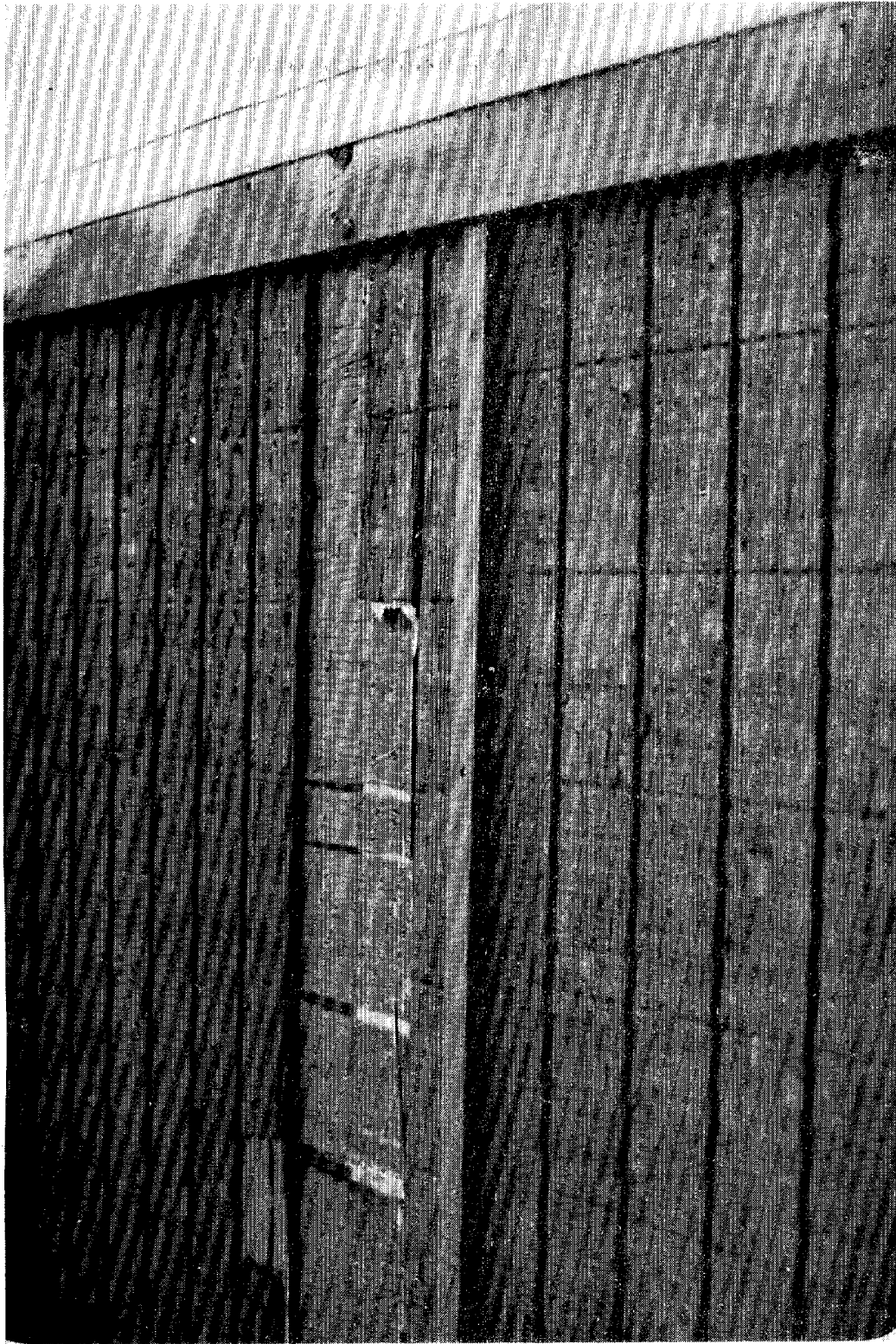


FIGURE 10
FENCE MATERIAL SPLITTING AND PULLING APART.

JOHN MELCHER
MONTANA

United States Senate

May 22, 1979

Honorable Elmer B. Staats
Comptroller General of
the United States
General Accounting Office Building
441 G Street, N. W.
Washington, D. C. 20548

Dear Mr. Staats:

On March 13, 1979, Jack Anderson, the syndicated columnist, published the enclosed article about the renovation work being done on housing at Malmstrom Air Force Base near Great Falls, Montana.

The Great Falls Tribune carried an independent article, also enclosed, which reports unfavorably on some of the work done by Praxis, Inc.


Accordingly, the undersigned asked the Secretary of the Air Force to have his inspector general investigate the situation. That letter and an unsigned report delivered to us on May 14 by Col. John C. Schroeder of Air Force Legislative Liaison are also attached.

This is our request that the General Accounting Office make an investigation of the work performed at Malmstrom by Praxis, Inc., whether it met contract requirements and whether the Air Force contract requirements are adequate to assure sound, workmanlike renovation of the buildings and lots involved in the contract.

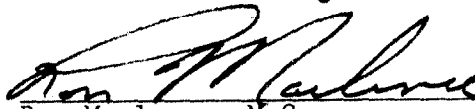
There is continuing criticism of the work accepted by the Air Force and an independent investigation and judgment are needed.

Thank you and best regards.

Sincerely,


Max Baucus, U.S.S.


John Melcher, U.S.S.

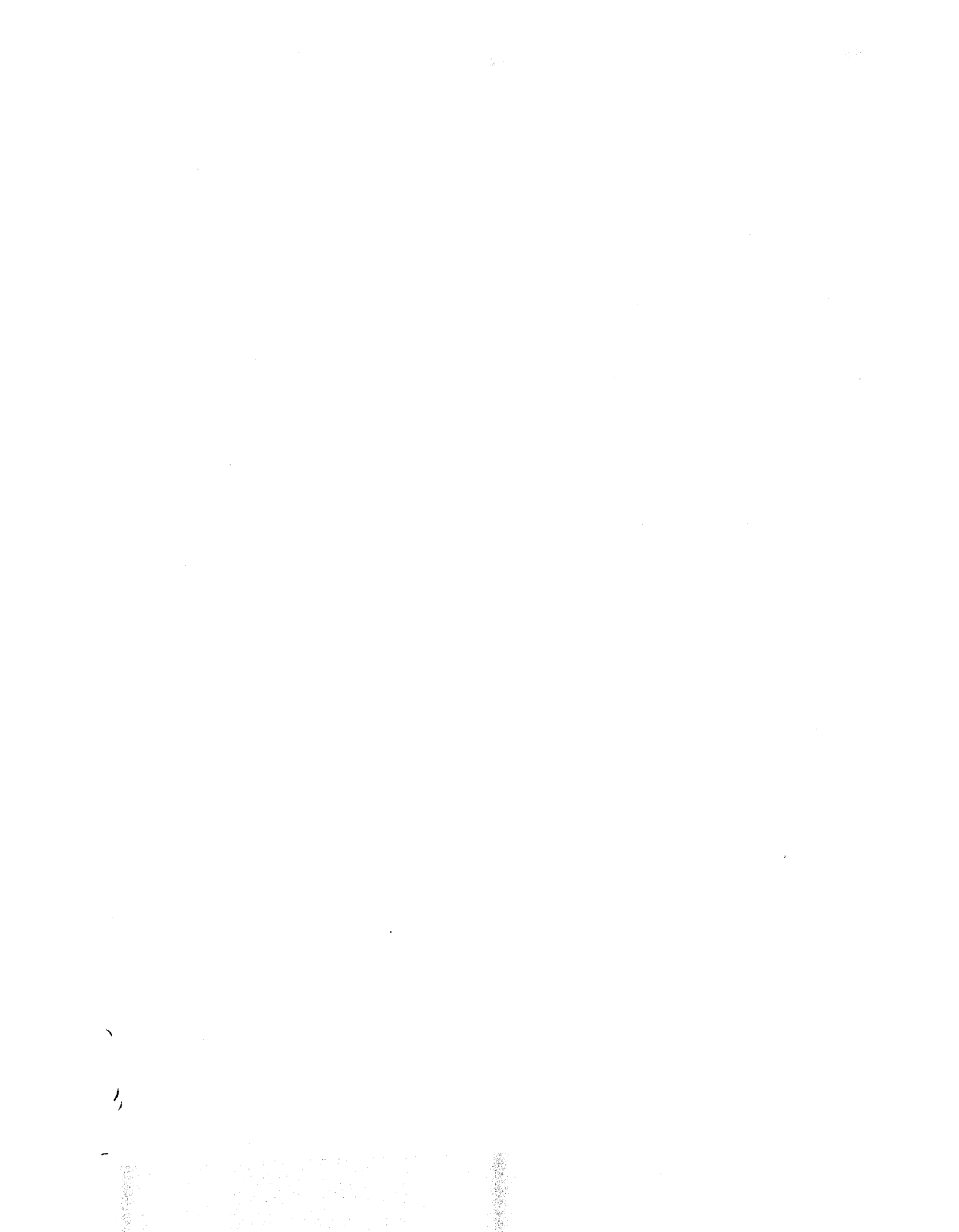

Ron Marlensee, M.C.

Enclosures
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