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CONSTRUCTION CONTRACTS

The initial site survey for the Titan I ICBM construction program was assigned to the Denver Area under the Omaha District in September 1958. It soon became apparent that four of the six proposed sites were without adequate access roads. To assure accessibility at the start of construction, Contract No. DA-25-066-eng-5177 was awarded to Northwestern Engineering Company on 29 September 1958 for \$294,000 for construction of approximately 10.4 miles of Lowry Range Road. This contract was completed on 20 May 1959 at a cost of \$307,709. Contract No. DA-25-066-eng-5346 was awarded to Colorado Constructors on 19 January 1959 for \$414,541.50 for construction of drainage structures on Lowry Range Road and for construction of access roads from Lowry Range Road to Sites 1A, 1B, 1C and 2A. This contract was completed on 9 September 1959 at a cost of \$423,281. To provide water at all sites at the start of construction, Contract No. DA-25-066-eng-5405 was awarded to M & G Drilling and Supply on 29 January 1959 in the amount of \$225,232 for drilling of water wells at all six sites. Twelve wells were drilled at an average depth of 1800' each, with completion on 17 July 1959 at a cost of \$411,452.

Invitation for bids for construction of Squadron I (Complexes 1A, 1B, and 1C) was dated 31 January 1959. The bids were opened on 8 April 1959 at Denver, Colorado. Contract No. DA-25-066-eng-5558 dated 17 April 1959 was awarded to a joint venture of contractors

# TITAN I

LOWRY I - CONTRACT DA-25-060-eng 555B

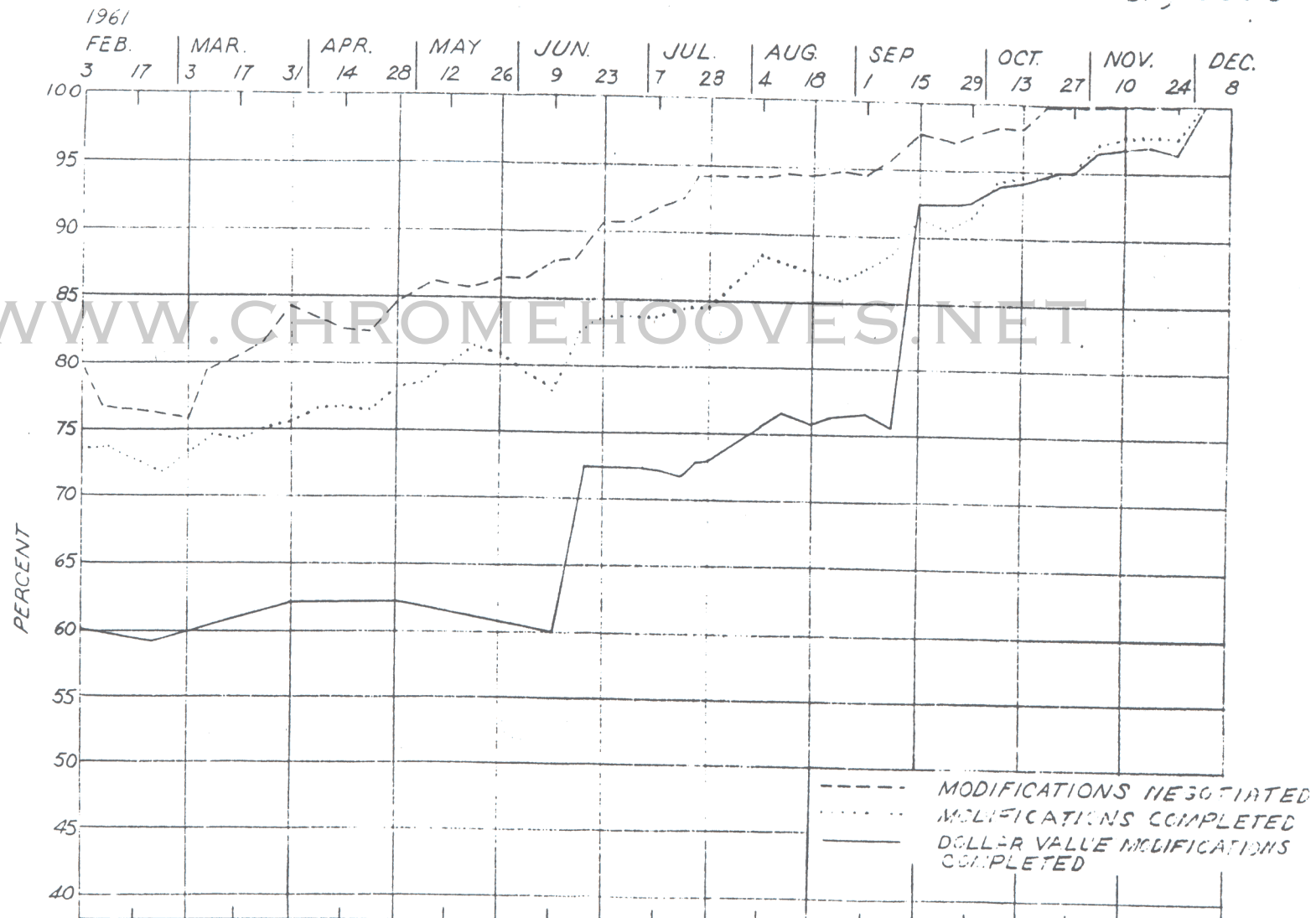


CHART A.5.11

# TITAN I LOWRY I - CONTRACT 11-25-60-5555

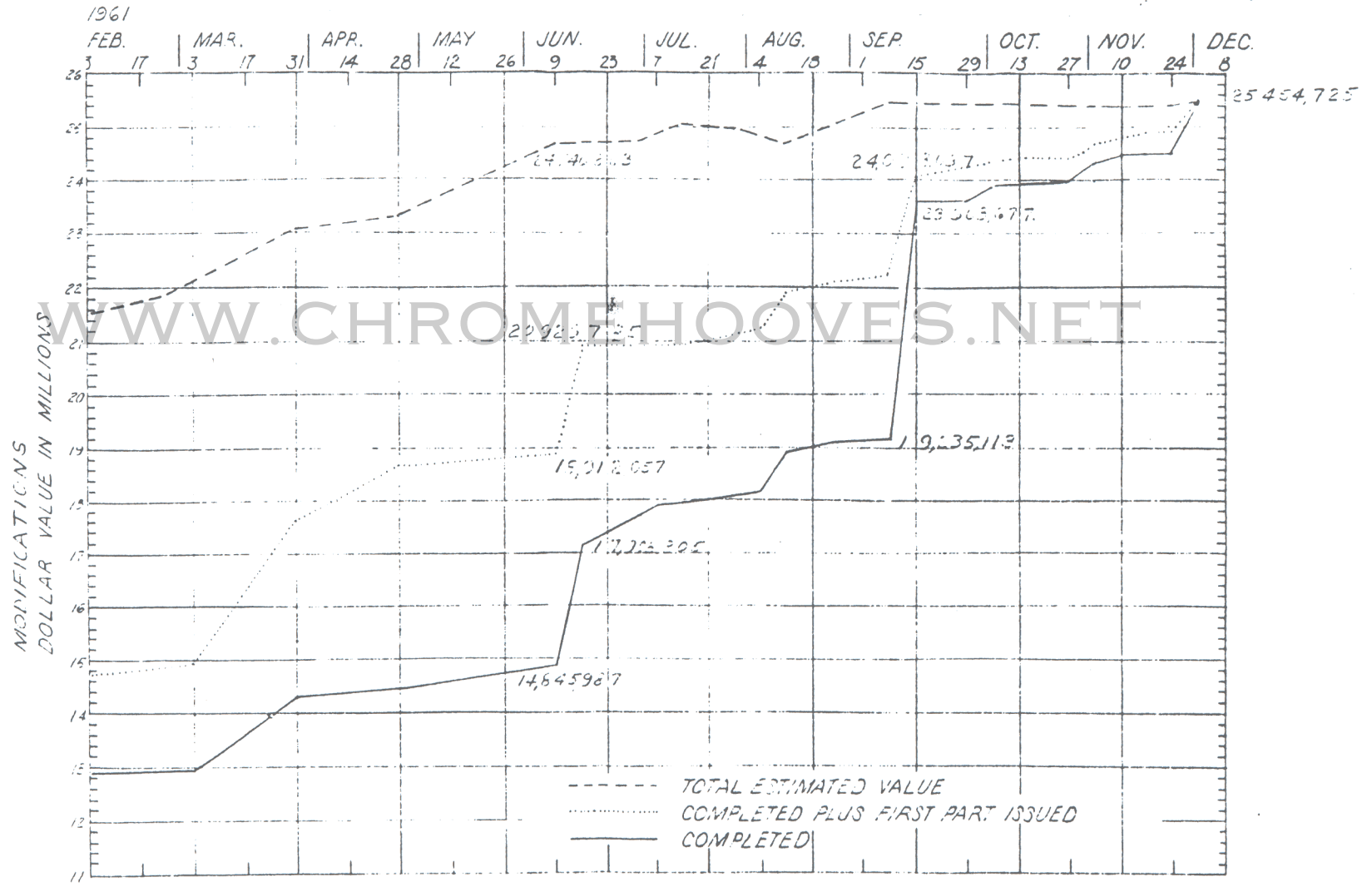
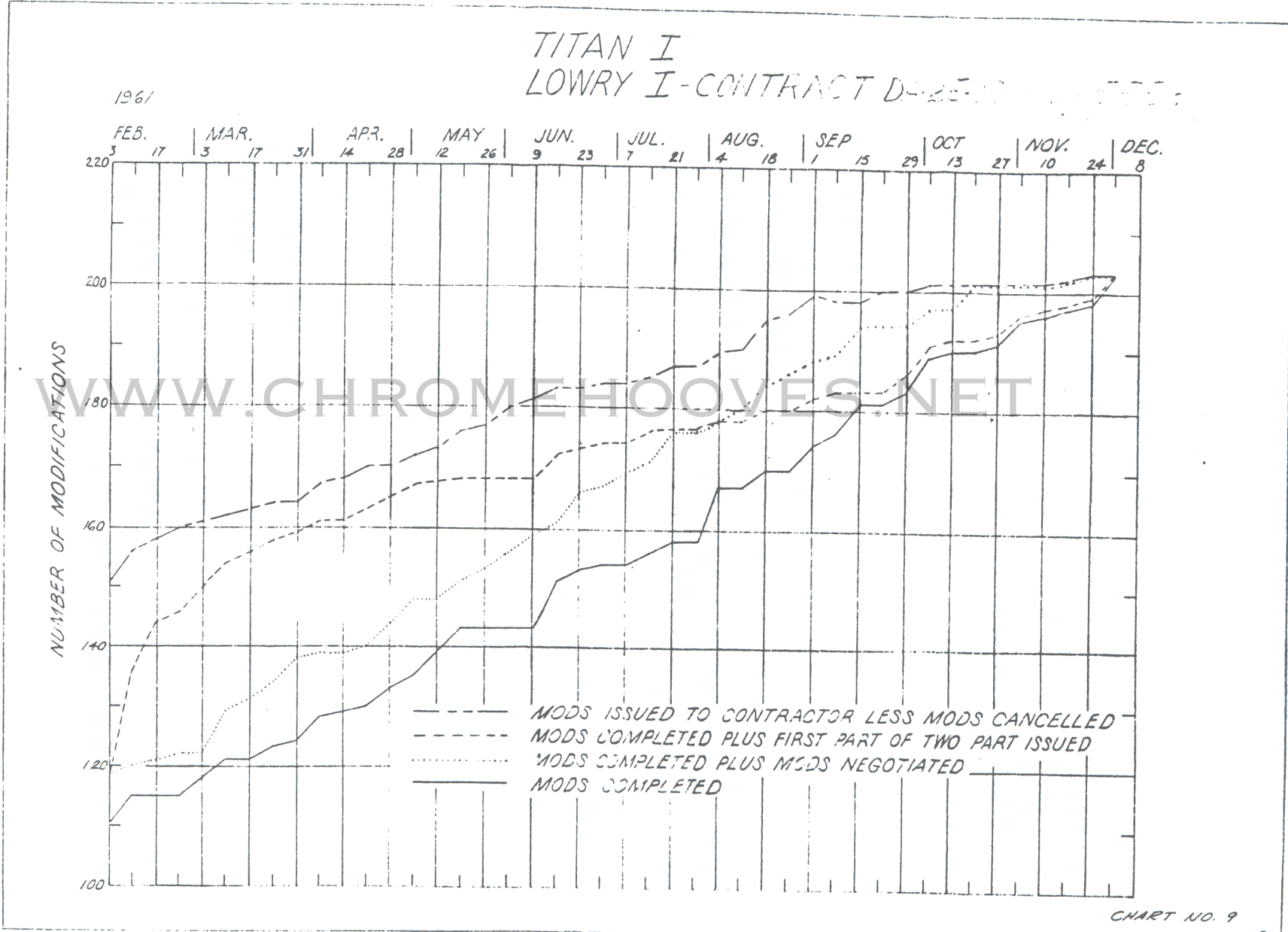
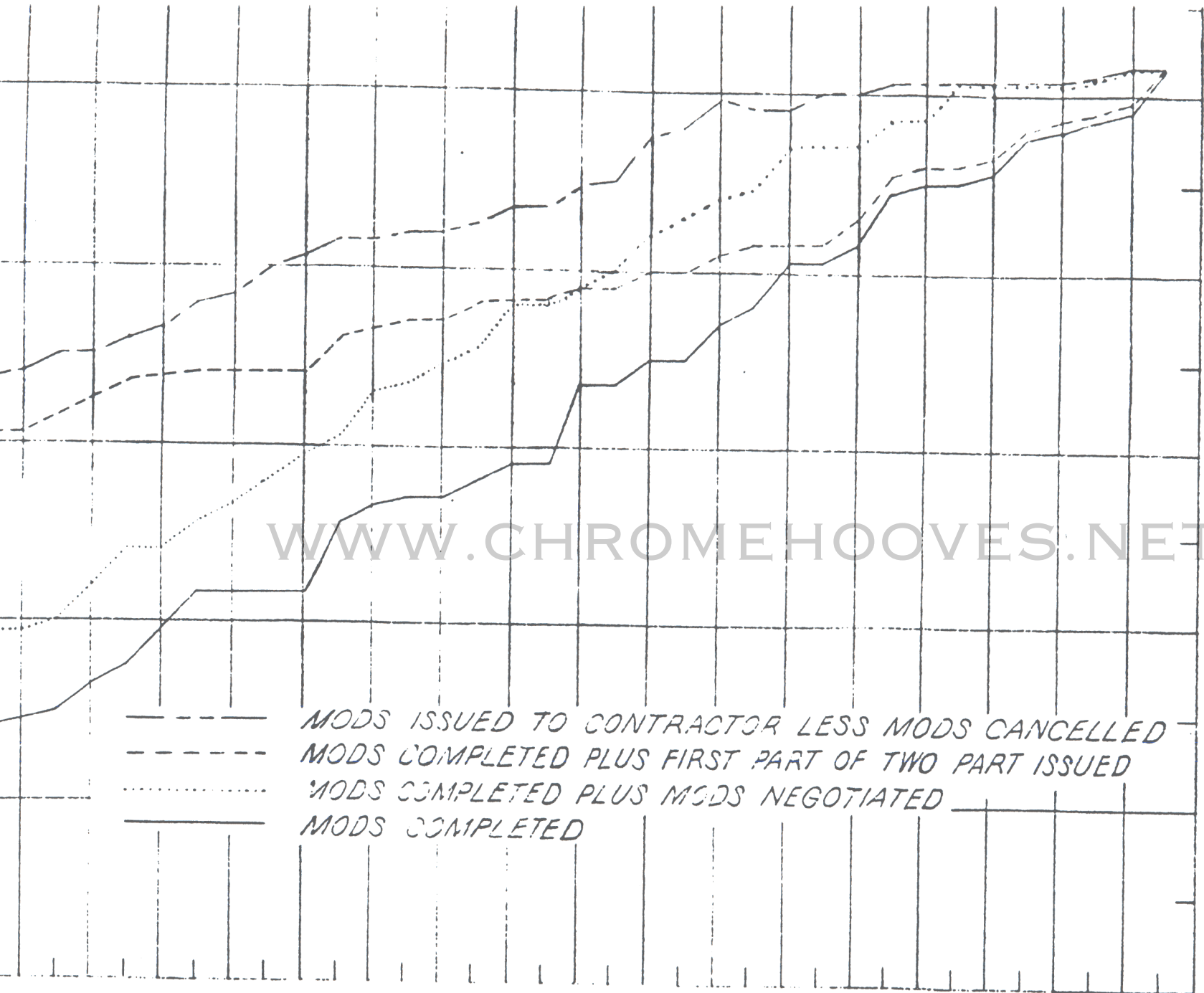


CHART NO. 10

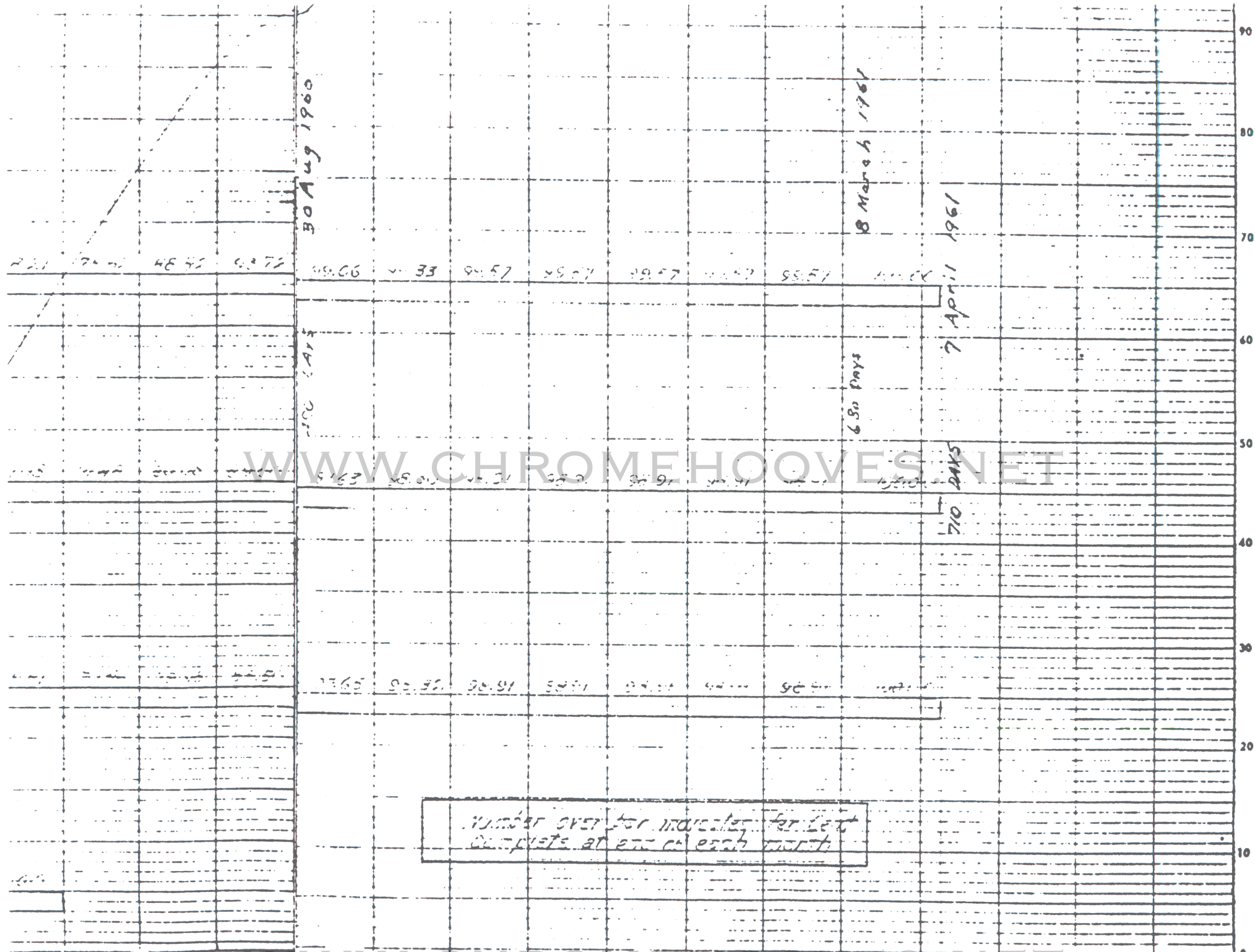


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- MODS ISSUED TO CONTRACTOR LESS MODS CANCELLED
- MODS COMPLETED PLUS FIRST PART OF TWO PART ISSUED
- ..... MODS COMPLETED PLUS MODS NEGOTIATED
- MODS COMPLETED

CHART NO. 9



CONSTRUCTION PROGRESS CHART

Sheet 1 of 22

|                            |  |                      |  |  |  |  |  |                    |  |
|----------------------------|--|----------------------|--|--|--|--|--|--------------------|--|
| 1. CONTRACTOR<br>M. J. ... |  | 2. PROJECT<br>75 ... |  | 3. GENERAL LOCATION<br>COMPLEX 1A, 1B & 1C |  | 4. CONTRACTOR'S NAME<br>J. G. Gibson<br>St. Ed. Paris & Carlom |  | 5. DATE<br>5/29/59 |  |
| 2. CONTRACT NUMBER<br>...  |  | 4. LOCATION<br>...   |  |  |  |  |  | 6. DATE<br>5/29/59 |  |

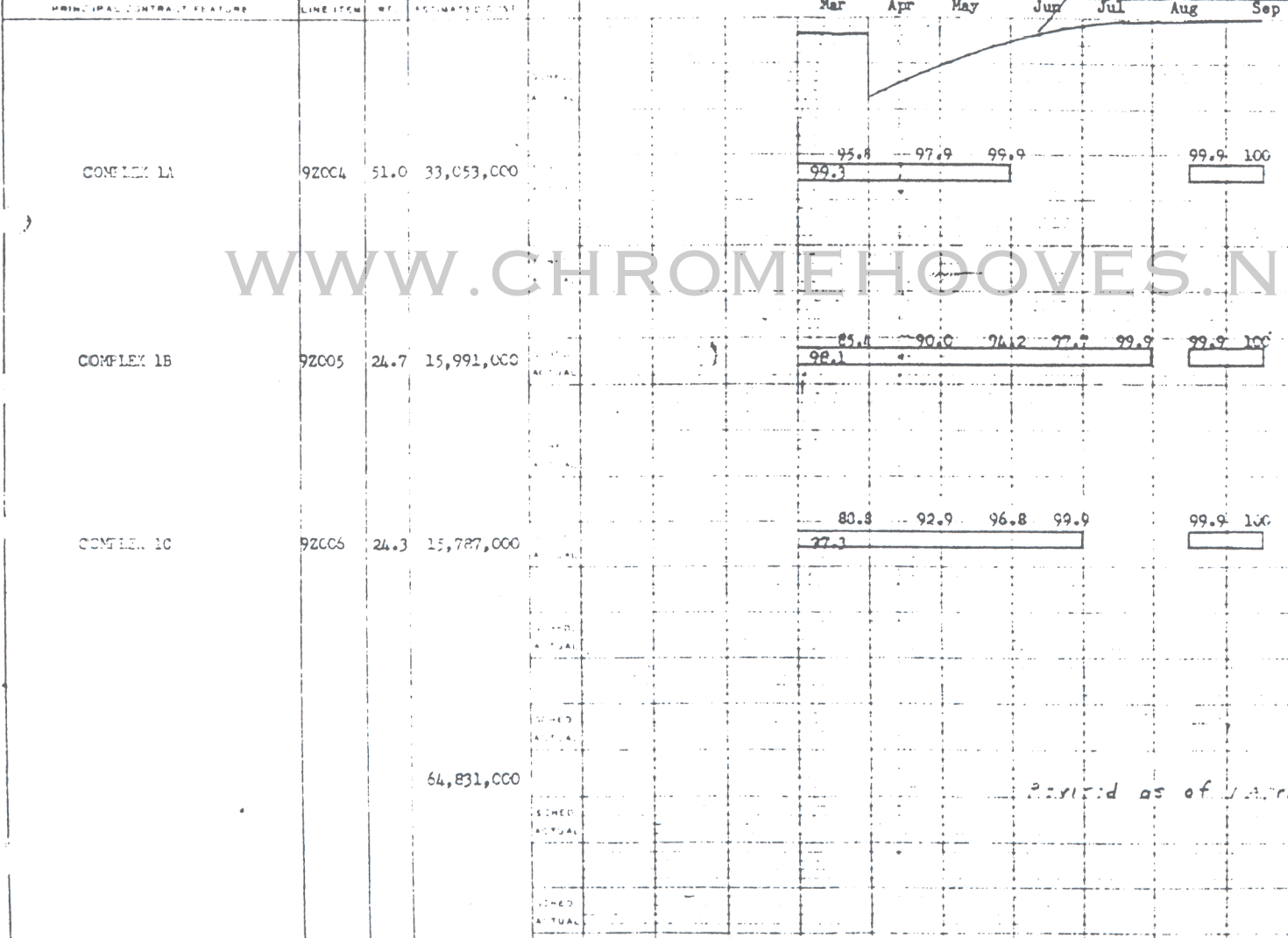
| PRINCIPAL CONTRACT FEATURE | LINE ITEM | QT         | ESTIMATED COST | SCHED. ACTUAL | ... |
|----------------------------|-----------|------------|----------------|---------------|-----|
| COMPLEX 1-A                | 1917      | 246        | 24             | SCHED. ACTUAL | ... |
| COMPLEX 1-B                | 2141      | 8,709,945  | 33             | SCHED. ACTUAL | ... |
| COMPLEX 1-C                | 2141      | 8,709,806  | 33             | SCHED. ACTUAL | ... |
| TOTAL                      |           | 40,600,000 | ...            | SCHED. ACTUAL | ... |
| MINIMUM REQUIREMENT        |           |            |                | SCHED. ACTUAL | ... |

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CONSTRUCTION PROGRESS CHART

REPORTS CONTROL SYMBOL  
ENGCM-7

|   |  |   |                                     |                      |                                     |
|---|--|---|-------------------------------------|----------------------|-------------------------------------|
| 1 CONTRACTOR<br>Morrison-Knudsen Co., Inc. & Assoc. | 2 PROJECT<br>WS-107 A-2 Technical Facilities<br>Lowry Air Force Base, Colorado | 3 CONTRACT DESCRIPTION<br>COMPLEX 1A, 1B & 1C | 4 SCHEDULE FROM APPROVAL<br>10/1/40 | 5 DATE<br>7/23/41    | 6 REPORTS CONTROL SYMBOL<br>ENGCM-7 |
| 7 CONTRACT NUMBER<br>DA-25-066-eng-5558             | 8 LOCATION<br>Lowry Air Force Base<br>Denver, Colorado                         |   | 9 APPROVAL OF WORK<br>[Signature]   | 10 DATE<br>Aug. 1941 | 11 LEGEND                           |



The Modifications above 154 as indicated on this Construction Schedule does not reflect additional time required and due under the respective Modifications and the time indicated for each of these modifications is for informational purposes only and will be revised as soon as it is possible to properly evaluate the added time required.

*[Handwritten signature]*

Revised as of 1/1/41

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# MANHOURS CHART - CONTRACT DA 5558

104000-  
MANHOURS (19007400)  
01/01/00 1:00

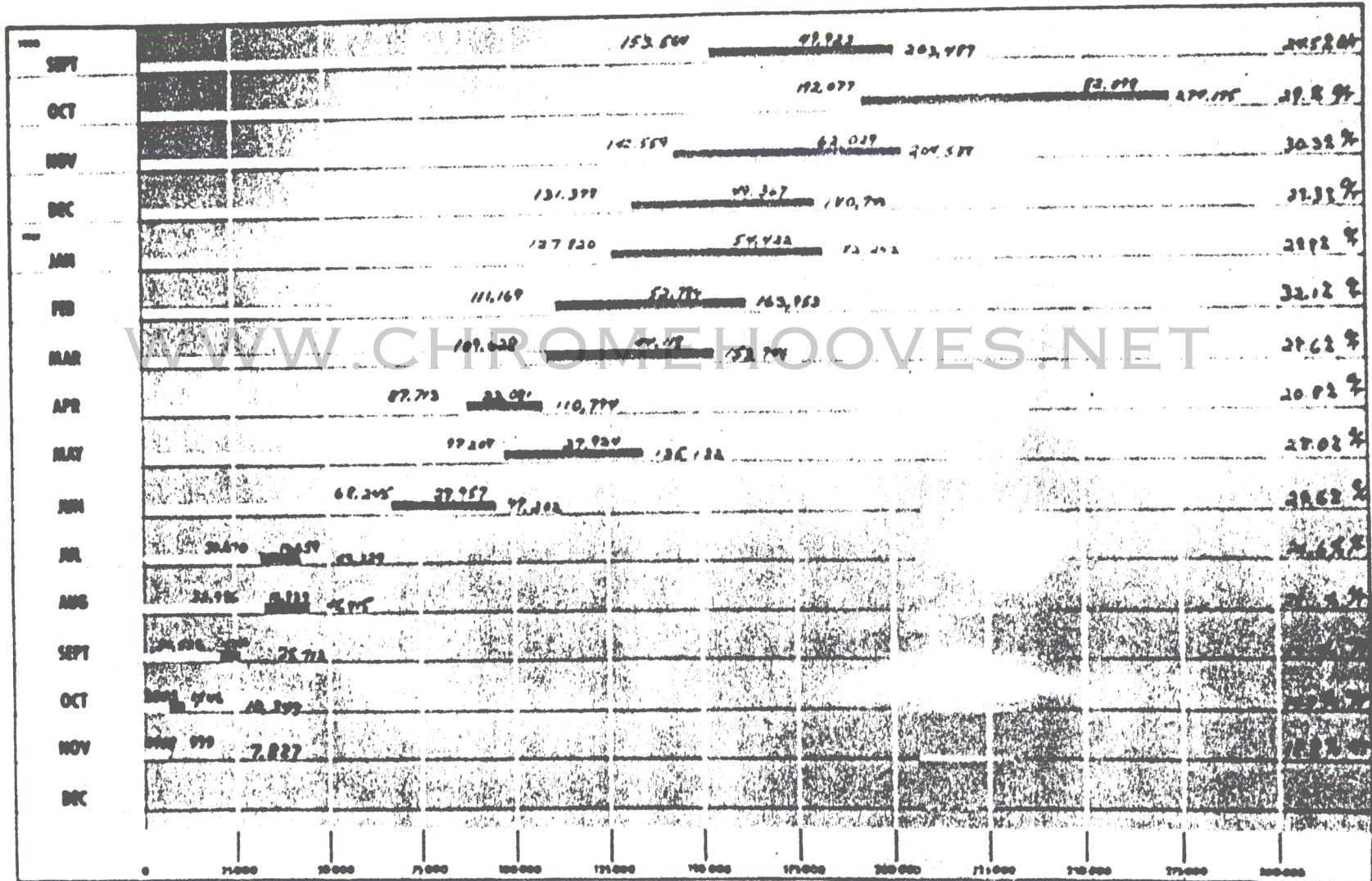


CHART / 2

composed of Morrison-Knudsen Company, Inc., sponsor, and Paul Hardeman, Inc.; F. E. Young Construction Company; Johnson, Drake & Piper, Inc.; and Olsen Construction Company. Notice to proceed was issued on 27 April 1959 and the contractor started site work on 1 May 1959 and excavation began on 7 May 1959.

The original contract was in the amount of \$40,668,034. This amount included standardized equipment to be furnished to Squadron II. The contract was completed on 4 August 1961 at a cost of \$66,231,948.

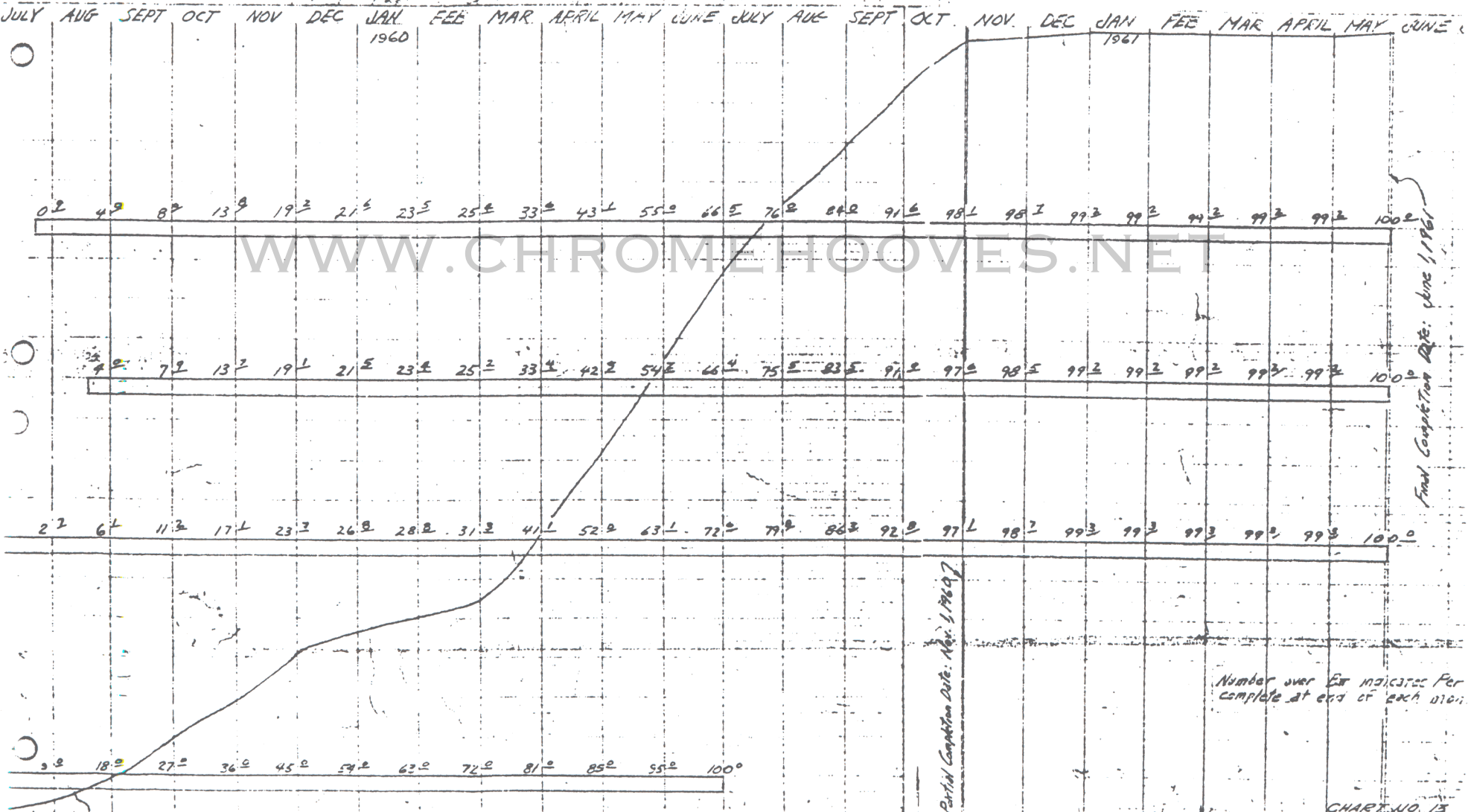
There were 27 modifications issued in an amount exceeding \$100,000 and 4 modifications which were formerly claims settled for an amount greater than \$100,000 each, as follows:

| <u>Mod. No.</u> | <u>Description</u>   | <u>Settled Amount</u> |
|-----------------|--|-----------------------|
| 1               | Additional construction details<br>442 drawings  | \$4,937,373           |
| 7               | Shock mount Equipment Terminal   | 639,127               |
| 8               | Changes to LOX tanks, structural changes<br>to Missile Silos, Propellant Terminal,<br>Control Center, Powerhouse, Portal Silo,<br>and Antenna Silo | 3,728,592             |
| 20              | Revise guide rail brackets in Missile Silos  | 180,389               |
| 22              | Revise piping platform supports in Missile<br>Silos  | 103,605               |
| 28              | Changes to Missile Silos for AMF   | 705,627               |
| 29              | Revise water treatment facilities  | 1,059,405             |
| 48              | Revise telephone and communication systems   | 106,537               |
| 58              | Revise location of Powerhouse pumps  | 107,443               |

| <u>Mod. No.</u>                                  | <u>Description</u>                                     | <u>Settled Amount</u> |
|--|--|-----------------------|
| 70   | Revise Missile and Antenna Silo closure doors          | \$ 285,749            |
| 84   | Flex hose revisions                                    | 358,534               |
| 96   | Acceleration of work                                   | 2,050,000             |
| 101  | Blast detector system                                  | 195,147               |
| 118  | Gravel areas for associate contractors                 | 198,700               |
| 122  | Additional PLS testing equipment & personnel           | 578,343               |
| 145  | Piping changes in Missile Silos & Propellant Terminals | 225,000               |
| 149  | Extension of time                                      | 1,715,457             |
| 156  | Revise PLS test procedures                             | 717,676               |
| 161  | Provide & maintain air conditioning units              | 158,420               |
| 166  | Validation testing                                     | 567,309               |
| 171  | Pipe supports  | 2,123,750             |
| 174  | Changes to Powerhouse & associated systems             | 437,635               |
| 179  | Change gaskets in PLS system                           | 126,090               |
| 192  | Modify chilled water piping at ice banks               | 111,922               |
| 207  | Modify & test blast valves                             | 189,300               |
| 225  | Modify exhaust structure in Powerhouse: CBR filters    | 150,018               |
| 230  | Overrun cement quantities                              | 177,039               |
| <u>MODS OVER \$100,000 RESULTING FROM CLAIMS</u> |  |                       |
| 110  | Winter concrete operations                             | 280,734               |
| 187  | Rehandling Re-steel & painting A/C unit                | 228,297               |
| 218  | Fabrication of PLS spools                              | 109,825               |
| 219  | Tunnel and Tunnel Jct. Maintenance & repair            | 161,862               |

PLAN PROGRESS CHART

COMPLEXES 2-A, 2-B, 2-C



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Final Completion Date: June 1, 1961

Partial Completion Date: Nov. 1, 1960

Number over Ex indicates Per complete at end of each month

CHART NO. 13

CONSTRUCTION PROGRESS CHART

MORRISON-KNUDSEN COMPANY  
INC & ASSOCIATES

WS 107 A-2  
TECHNICAL FACILITIES  
LOWRY AIR FORCE BASE  
DENVER, COLORADO

COMPLEXES 2A, 2-B, 2-C

DA-25-066-eng-5654

JOB AS A WHOLE

100 26,944,820<sup>00</sup>

JUNE  
1959

JULY AUG SEPT OCT NOV DEC 1960 JAN FEB MAR APRIL MAY JUNE JUL

COMPLEX 2-A

33% 8,935,402<sup>66</sup>

COMPLEX 2-B

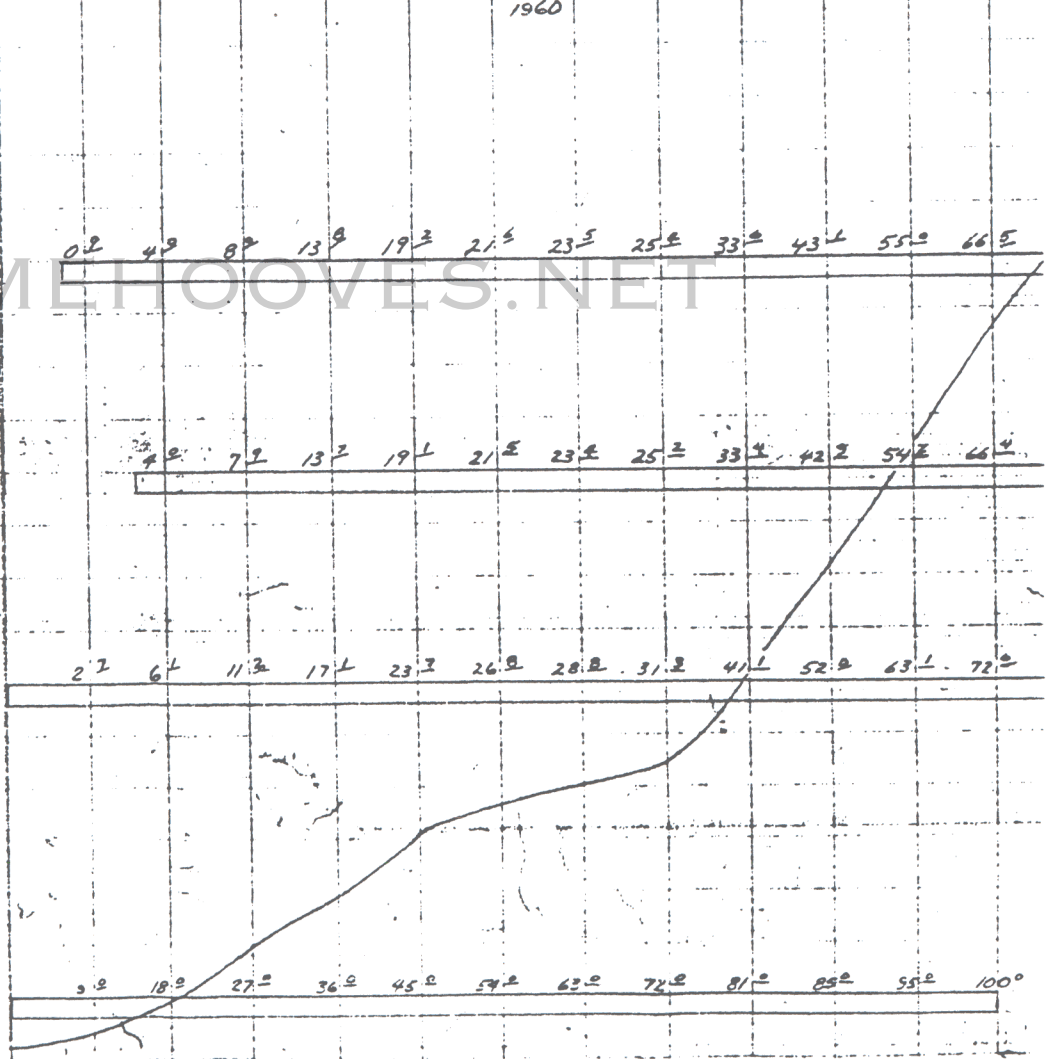
35% 8,991,275<sup>00</sup>

COMPLEX 2-C

33% 9,017,519<sup>06</sup>

MATERIAL PROCUREMENT

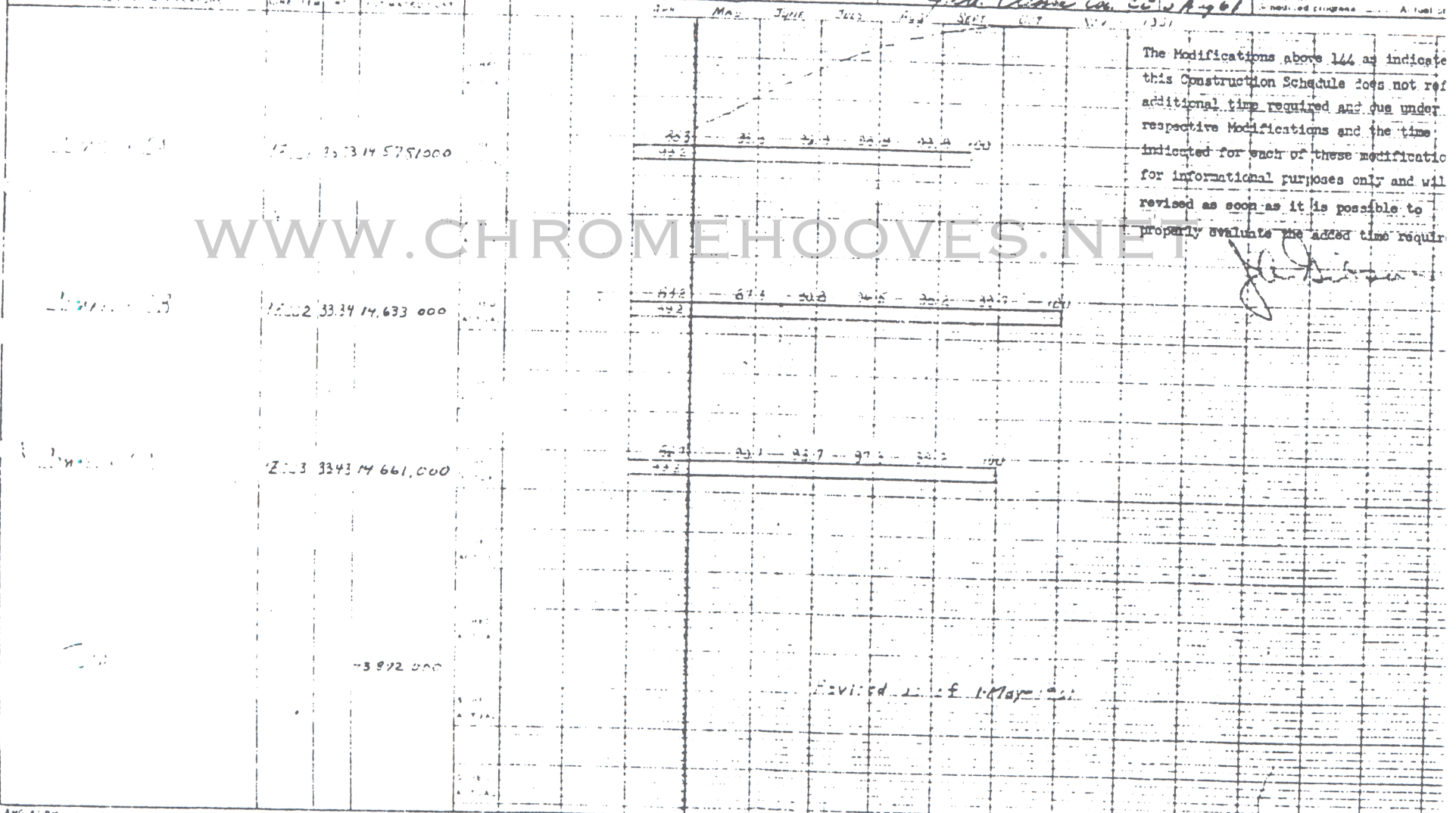
Notice to proceed July 1, 1959



CONSTRUCTION PROGRESS CHART

REPORTS CONTROL BY  
ENGCOM - 7

|                                 |                                 |   |   |                          |   |
|---------------------------------|---------------------------------|---|---|--------------------------|---|
| CONTRACT NO.<br>1A SE           | PROJECT<br>CONSTRUCTION         | CONTRACT DESCRIPTION<br>LAWRENCE A, B 100 | DATE FOR APPROVAL<br>10/1/61                        | DATE<br>10/1/61          | REPORTS CONTROL BY<br>ENGCOM - 7  |
| CONTRACT VALUE<br>15,314,575.00 | CONTRACT VALUE<br>15,314,575.00 |   | APPROVAL AUTHORITY<br>John Plummer Co. Inc. 10/1/61 | APPROVAL DATE<br>10/1/61 | LEGEND<br>Actual progress to date (hatched)<br>Actual progress (dotted)<br>Scheduled progress (solid) |



The Modifications above 144 as indicate this Construction Schedule does not reflect additional time required and due under respective Modifications and the time indicated for each of these modifications for informational purposes only and will be revised as soon as it is possible to properly evaluate the added time required.

*[Handwritten signature]*

Revised 10/1/61

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There is one outstanding claim pending for Contract DA-5558. This claim is for additional compensation for revisions to LOX storage tanks T-201 above that included in Modification No. 8, Contract DA-5558 under unilateral settlement and claim for additional compensation for LOX subcoolers T-401 and helium subcoolers T-402 which were not changed under Modification No. 8 in the total amount of \$1,774,027.

Invitation for bids for construction of Squadron II (Complexes 2A, 2B and 2C) was dated 13 April 1959. The bids were opened on 10 June 1959 at Denver, Colorado. As a result, Contract No. DA-25-066-eng-5654 was awarded on 12 June 1959 to the same joint venture of contractors as Squadron I. Notice to proceed was issued on 1 July 1959 and site work started immediately with the first excavation on 1 July 1959.

The original contract was in the amount of \$26,944,820. The contract was completed on 11 October 1961 at a cost of \$44,129,237.

There were 24 modifications issued in an amount exceeding \$100,000 and 3 modifications which were formerly claims settled for an amount greater than \$100,000 each, as follows:

MODS OVER \$100,000

| <u>Mod. No.</u> | <u>Description</u>  | <u>Settled Amount</u> |
|-----------------|---|-----------------------|
| 1               | Shock mounting Equipment Terminal floor   | \$ 664,947            |
| 2.              | Changes required to correct conflicts in contract dwgs & specs; Missile Silos, Powerhouse, PLS, tunnels & general | 1,874,492             |

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| <u>Mod. No.</u> | <u>Description</u>   | <u>Settled Amount</u> |
|-----------------|--|-----------------------|
| 11              | Relocate guide rail brackets in Missile Silo                                       | \$ 153,367            |
| 19              | Changes for AMF in Missile Silo  | 707,001               |
| 20              | Revise water treatment facility  | 784,456               |
| 21              | Emergency raw water supply in Powerhouse<br>Add vibration isolators to compressors | 106,405               |
| 36              | Changes to telephone & communications system                                       | 155,236               |
| 47              | Change location of pumps in Powerhouse   | 107,443               |
| 57              | Revise Missile & Antenna Silo doors  | 285,749               |
| 70              | Revise specs on flex hose  | 395,945               |
| 82              | Acceleration of work   | 1,819,471             |
| 87              | Blast detector system  | 193,210               |
| 106             | Additional PLS test equipment & personnel  | 355,856               |
| 120             | Stromberg-Carlson requested changes in conduit and terminal cabinet                | 109,852               |
| 131             | Piping changes in Missile Silo and Propellant Terminal                             | 225,000               |
| 135             | Parking areas for associate contractors  | 197,013               |
| 139             | Time extension for Mods 1-144  | 1,600,780             |
| 141             | Revise location of wall mounted utilities & duct work in Antenna Silo              | 154,832               |
| 145             | Revise PLS test procedure  | 718,197               |
| 155             | Validation testing   | 543,889               |
| 160             | Pipe supports  | 2,123,750             |
| 164             | Powerhouse & associated systems  | 399,171               |
| 183             | Modify chilled water piping at ice banks   | 111,355               |



# TITAN I LOWRY II-CONTRACT DA-25-066-eng 5654

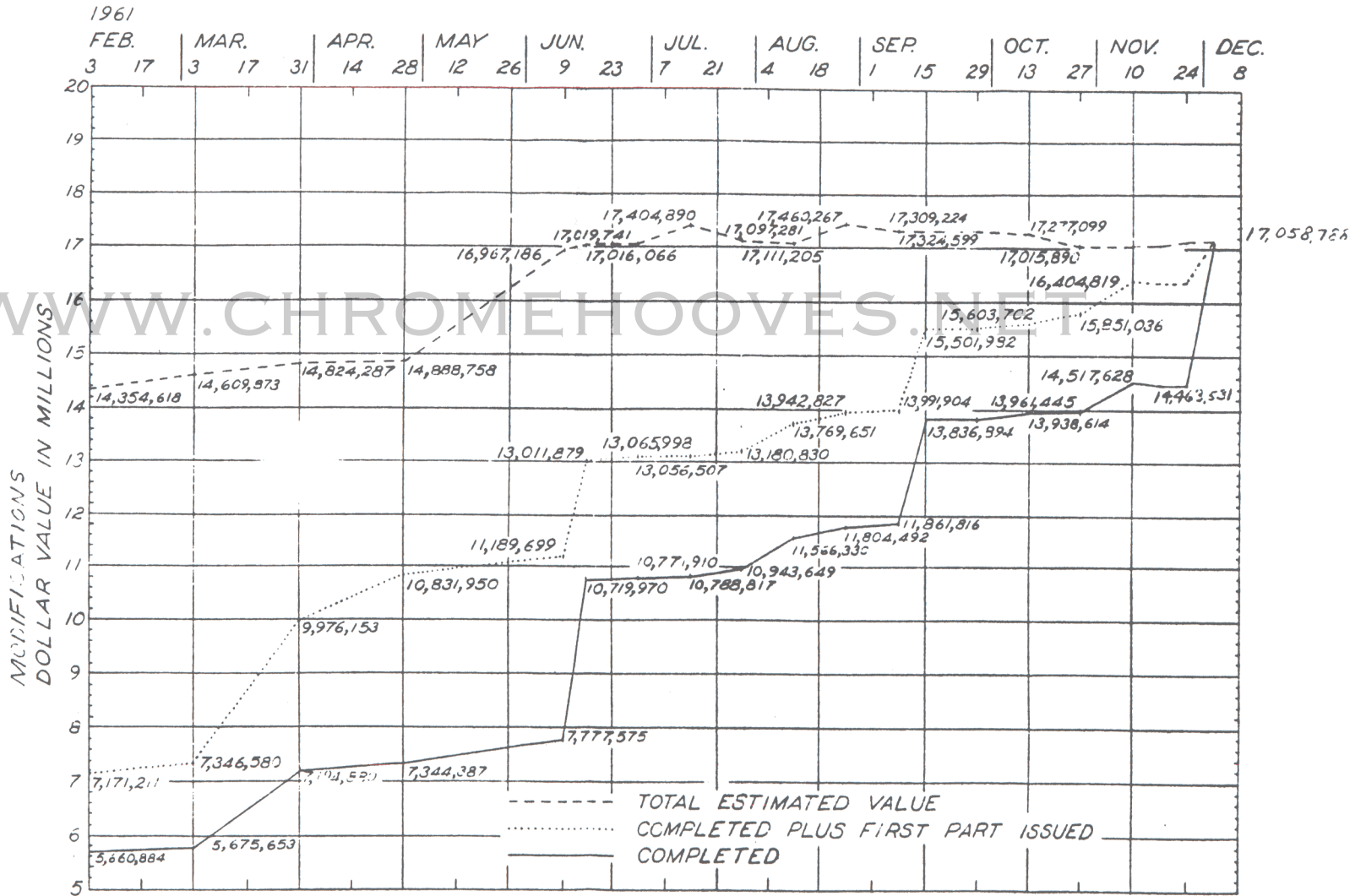
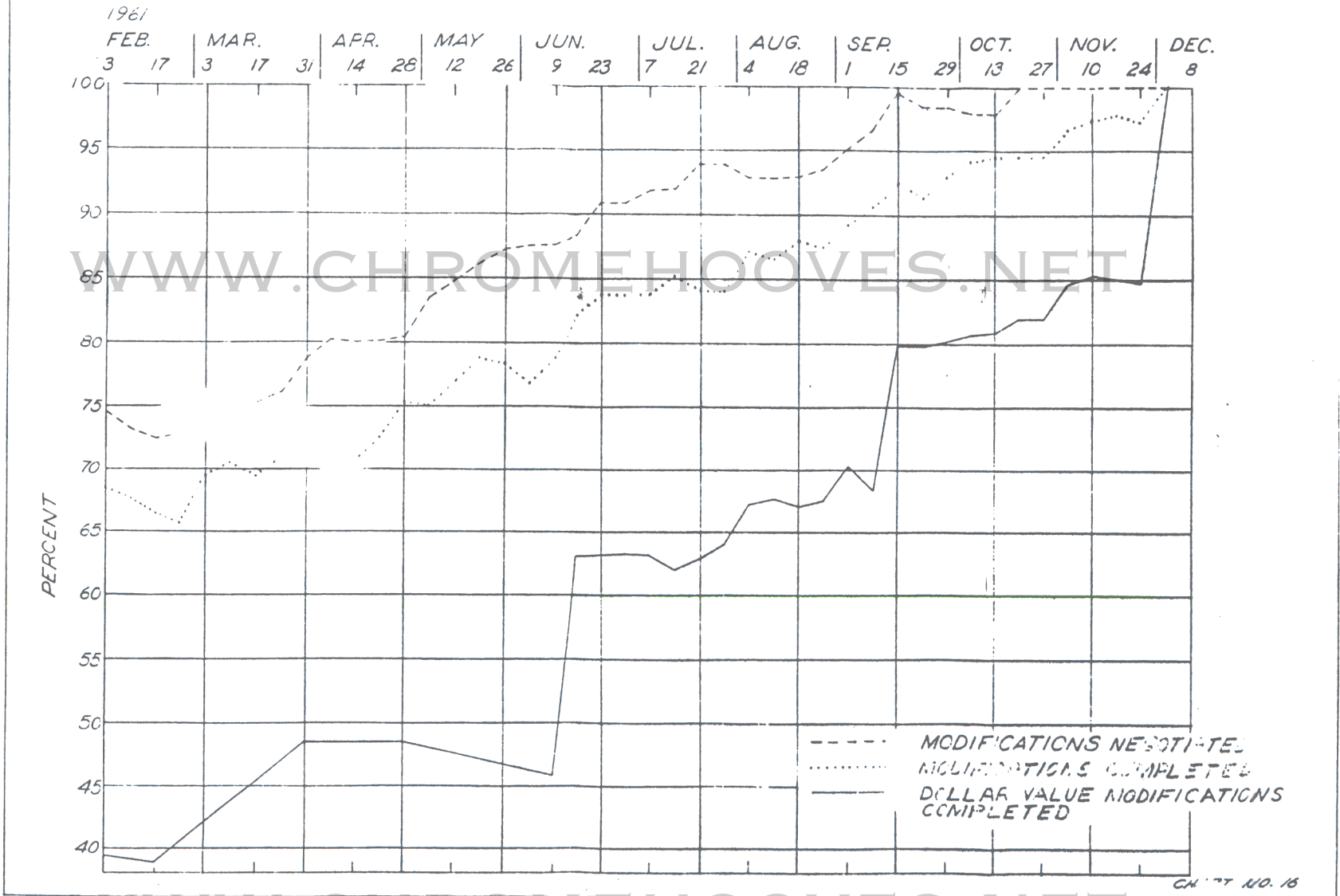


CHART NO. 17

# TITAN I

LOWRY II CONTRACT DA-45-006-eng 5654



# TITAN I LOWRY II-CONTRACT DA-25-080-cm-5654

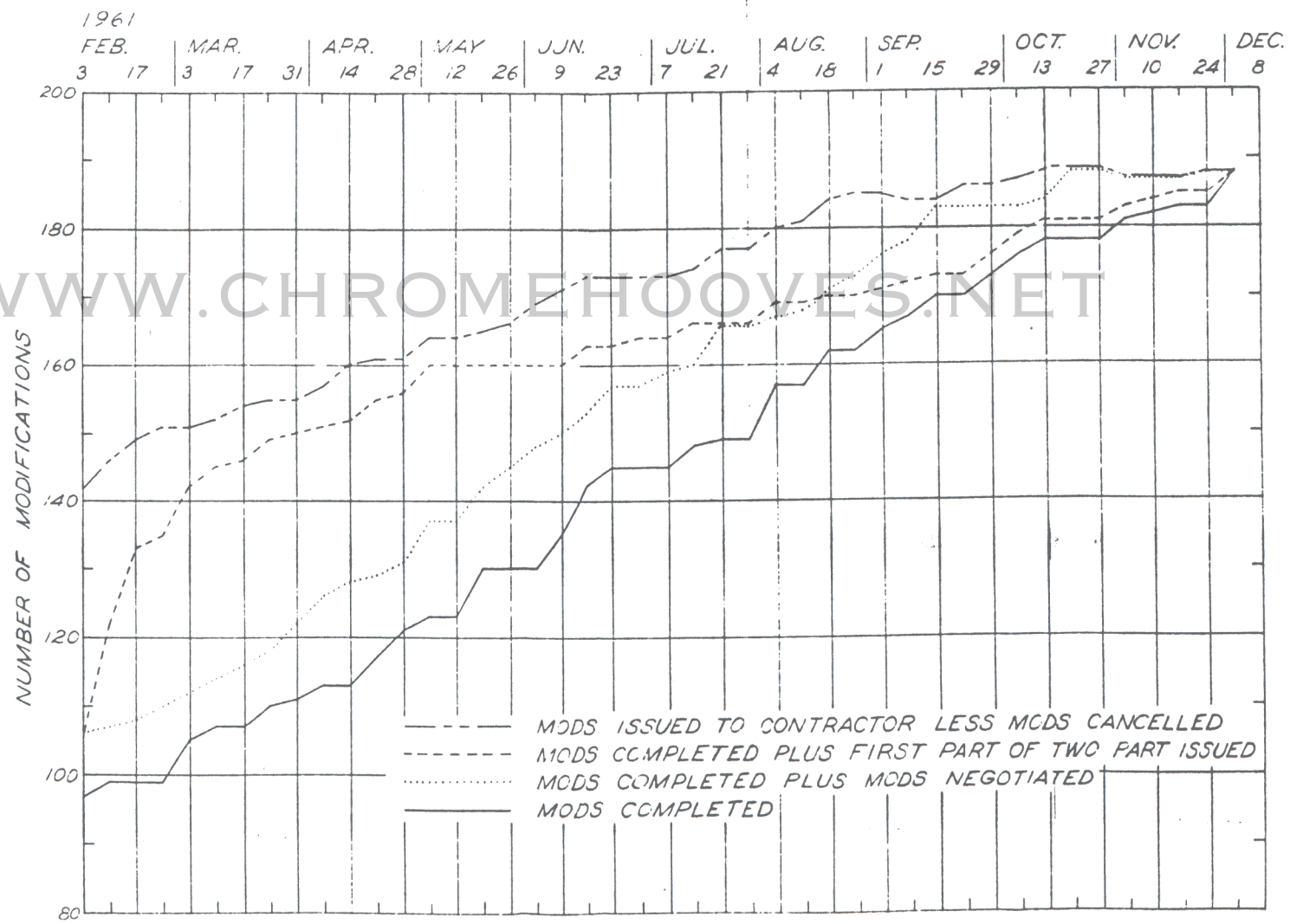
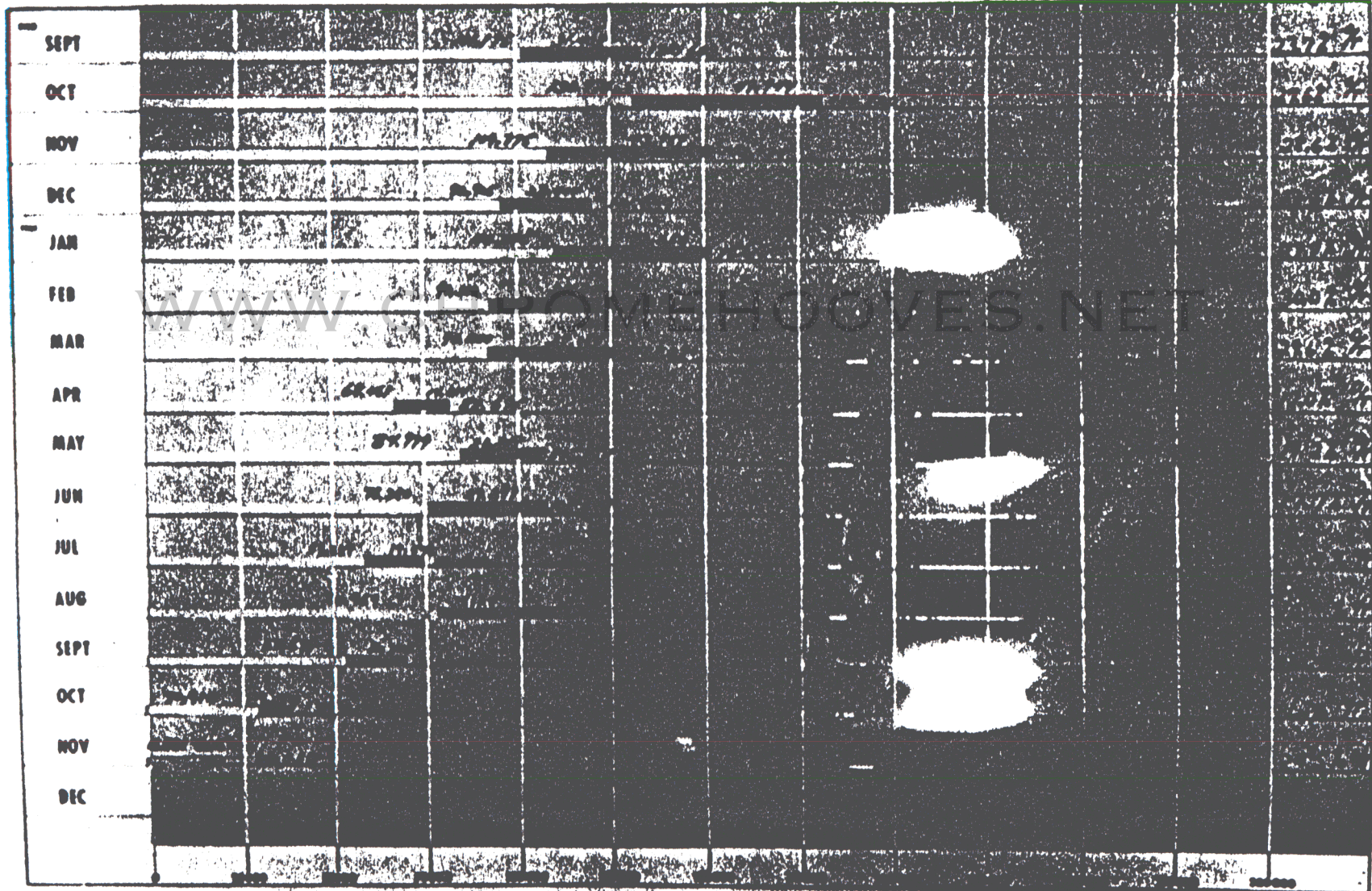


CHART NO. 15

# MANHOURS CHART - CONTRACT DA 5654

LEGEND  
 ■■■■■ MANHOURS OVERTIME  
 ■■■■■ REGULAR TIME



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CHART 18

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| <u>Mod. No.</u>                                  | <u>Description</u>  | <u>Settled Amount</u> |
|--|---|-----------------------|
| 196  | Modify & test blast valves  | \$ 126,200            |
| 212  | Exhaust structure in Powerhouse;<br>modify blast valves; install CBR<br>filters | 135,000               |
| <u>MODS OVER \$100,000 RESULTING FROM CLAIMS</u> |   |                       |
| 98   | Winter concrete operations  | 292,419               |
| 208  | Refabrication of PLS spools   | 109,825               |
| 209  | Tunnel and Tunnel Junction maintenance<br>and repair                            | 222,352               |

Invitation for bids for the construction of Access Roads-Phase II on Lowry Bombing Range was issued on 27 January 1960. The bids were opened on 3 March 1960 in Denver, Colorado. Contract DA-25-066-eng-6125 was awarded on 15 March 1960 to Peter Kiewit Sons' Company of Omaha, Nebraska, for \$1,298,264.50, for providing an all-weather surface for the Lowry Range Road. The contract was completed on 1 September 1960 at a cost of \$1,318,998.

Guided Missile Assembly Building and Technical Supply Facilities on Lowry Air Force Base were constructed by Thomas Bate and Sons, Inc., of Denver, Colorado under Contract DA-25-066-eng-6160, which was awarded on 1 April 1960 in the amount of \$1,145,402. Construction was completed on 4 May 1961 at a cost of \$1,394,569. There was one modification issued in an amount greater than \$100,000. This was Modification No. 9 for additional changes to monorail and diesel generators at a total cost of \$197,742. There is one outstanding claim as of the time of this report. This claim is in the amount of \$21,610 which the

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contractor states is due for use of heavy weight blocks in lieu of light weight.

Nosecone Facilities on Lowry Air Force Base, Denver, Colorado were constructed by Westwood Construction Company of Denver under Contract DA-25-066-eng-6311, awarded on 20 June 1960 in the amount of \$308,356.45. The work included Gate House, Shop-Small Arms, Storage-Spare Parts, Storage Base M/C Magazine and Storage Base Segregated. Construction was completed on 28 February 1961 at a cost of \$345,054.

Contract DA-7113, Perimeter Fencing, Squadrons I and II, Lowry Air Force Base, Denver, Colorado, was awarded to Amco Fence Company of Houston, Texas in the amount of \$124,749.80 on 31 July 1961. The contract was for the installation of chain link fence complete including gates, barriers, and crossings for all six sites. The contract was completed 14 December 1961 at a cost of \$128,267.

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PRINCIPAL CONSTRUCTION SUBCONTRACTS

Contract DA-25-066-eng-5558:

Subcontractor

Phase of Work

Automatic Sprinkler Corp.  
Denver, Colorado

Furnish and install Fire  
Protection System'

Fenestra, Inc.  
Denver, Colorado

Furnish and install wall panels,  
metal doors & hardware

Fischbach & Moore, Inc.  
Denver, Colorado

Furnishing & installation of  
electrical work

Sam Fox Sheet Metal Company  
Denver, Colorado

Furnishing & installing sheet  
metal for ventilating & air  
conditioning

William Van Genderen Company  
Denver, Colorado

Installing movable wall panels,  
doors & hardware

Hopkins Construction Company  
Denver, Colorado

Open cut excavation

Industrial Painting Corp.  
Riverside, California

Painting and Damp-proofing

Johnson Service Company  
Denver, Colorado

Furnishing and installing  
temperature controls

Meehleis Steel Company  
Vernon 58, California

Furnishing and installation  
of reinforcing steel

Otis Elevator Company  
New York 1, New York

Furnishing and installation  
of elevators

Preload Company, Inc.  
New York 16, New York

Furnishing & installing horizontal  
prestressed reinforcement

Contract DA-25-066-eng-5654:

Automatic Sprinkler Corp.  
Denver, Colorado

Furnish & install fire pro-  
tection system

Sam Fox Sheet Metal Company  
Denver, Colorado

Furnishing & installing sheet  
metal for ventilating & air  
Conditioning

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Subcontractor

William Van Genderen Company  
Denver, Colorado

Hopkins Construction Company  
Denver, Colorado

Industrial Painting Corp.  
Riverside, California

Johnson Service Company  
Denver, Colorado

Ling-Howard Electric Company  
Denver, Colorado

Meehleis Steel Company  
Vernon 58, California

Otis Elevator Company  
New York 1, New York

Preload Company, Inc.  
New York 16, New York

Stearns-Roger Manufacturing Co.  
Denver, Colorado

Contract DA-25-066-eng-6160:

Curtis Painting & Decorating Co.  
Denver, Colorado

Diamond Tile Company  
Littleton, Colorado

M. W. Edwards Plastering  
Denver, Colorado

Englewood Construction Co.  
Englewood, Colorado

Sam Fox Sheet Metal Company  
Denver, Colorado,

Phase of Work

Install movable wall panels,  
doors & hardware

Open cut excavation

Painting and damp-proofing

Furnish & install temperature  
controls

Furnishing & installation of  
Electrical work

Furnish & install reinforcing  
steel

Furnish & install elevators

Furnish & install horizontal  
prestressed reinforcement

Install temporary air & water  
lines

Painting

Furnish & install ceramic  
floor & wall tile

Lathing and Plastering

Install sanitary sewers &  
outside water supply & storm  
drains

Sheet metal work for plumbing,  
heating, ventilation & air  
conditioning

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Subcontractor

William Van Genderen Company  
Denver, Colorado

Lauren-Burt, Inc.  
Denver, Colorado

Martinson Construction Co.  
Denver, Colorado

Natkin and Company  
Denver, Colorado

L. Nothhaft and Son  
Denver, Colorado

Osborne Masonry Construction Co.  
Denver, Colorado

Reynolds Electrical and Engineering  
Company, Inc.  
Englewood, Colorado

Schriber Decorating Company  
Denver, Colorado

United Materials, Inc.  
Denver, Colorado

Western Paving Construction Company  
Denver, Colorado

Contract DA-25-066-eng-6311:

Aladdin Iron and Steel Corp.  
Denver, Colorado

Colorado Fuel & Iron Corp.  
Denver, Colorado

Curtis Painting & Decorating Co.  
Denver, Colorado

Phase of Work:

General sheet metal work,  
install metal toilet partitions,  
& hoisting and installing of  
steel roof decking

Furnish & install accoustical  
& gypsum board ceilings,  
including suspension systems

Transit-mixed concrete, excava-  
tion & backfill

All mechanical work, gas distri-  
bution, water supply, sanitary  
sewer, process vessels and  
piping

Furnish & install automatic  
sprinkler system

All masonry work

Electrical work

Furnish & install gypsum wal  
board

Roofing, roof insulation,  
perimeter insulation and da  
proofing

Furnish subbase and base cou-  
bituminous pavements, etc.

Structural steel

Fencing

Painting

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Subcontractor

John F. McCauley, Inc.  
Denver, Colorado

Reynolds Electrical & Engineering  
Co., Inc.  
Englewood, Colorado

Norman D. Schillo  
Littleton, Colorado

Western Paving Company  
Denver, Colorado

Phase of Work

Mechanical Work

Electrical Work

Masonry Work

Paving

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CONTRACTING OFFICER AUTHORITY

Contracting Officer Authority for the missile construction work near Denver, Colorado, was retained by Omaha District from 29 September 1958 to 15 April 1960, at which time the Area Engineer, Denver Area, Omaha District was designated successor Contracting Officer.

By letter dated 13 April 1959, Lt. Colonel Paavo D. Carlson was delegated Authorized Representative of the Contracting Officer by D. G. Hammond, Colonel, Corps of Engineers, District Engineer, Contracting Officer, Omaha District.

By letter dated 17 April 1959 from Colonel D. G. Hammond, District Engineer, the Denver Area Engineer was given authority to prepare official Government estimates for change orders. Letter indicated the estimates would not receive a detailed review by the Omaha District Office.

Letter dated 11 June 1959 from Leonard J. Goodsell, Lt. Colonel, Corps of Engineers, Deputy Omaha District Engineer, Contracting Officer, designated William J. Brummette Authorized Representative of the Contracting Officer during such time as he was designated Acting Area Engineer of the Denver Area by Area Order.

By letter dated 6 August 1959, Mr. Brummette was redesignated Authorized Representative of the Contracting Officer by John M. Frassrand, Lt. Colonel, Corps of Engineers, Contracting Officer, with the same

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restriction as imposed by Lt. Colonel Leonard J. Goodsell when he was Contracting Officer.

By letter dated 13 April 1960, D. G. Hammond, Colonel, Corps of Engineers, Omaha District Engineer, designated Lt. Colonel Carlson Contracting Officer with a five million dollar aggregate amount limit per contract and with the provisions that he would issue no time extensions without the prior approval of the District Engineer.

By letter dated 14 April 1960 from Colonel Hammond, Contracting Officer authority was transferred to Lt. Colonel Carlson for contracts DA-5558, DA-5654, DA-5685, DA-6125, and DA-6160.

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By letter dated 15 April 1960 from Colonel Hammond, Contracting Officer authority was transferred to Lt. Colonel Carlson for contracts DA-5956, DA-6056, DA-5685, DA-6141, and C-60-649. With the transferral of Contracting Officer authority, the official files were transferred to the Denver Area.

Lt. Colonel Carlson designated Ralph F. Rader (or C. A. Rife, Alternate) Contracting Officer Representative by letter dated 18 April 1960 for purpose of approving shop drawings.

Lt. Colonel Carlson designated Jerald K. Riggs (or Carl G. Johnson, Alternate) Contracting Officer Representative for purpose of approving payment estimates, by letter dated 18 April 1960.

By letter dated 16 July 1960, Lt. Colonel Carlson was redelegated

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Contracting Officer Authority by Colonel H. G. Woodbury, Jr., Corps of Engineers, District Engineer, Contracting Officer (Colonel Woodbury succeeded Colonel Hammond as District Engineer.)

By letter dated 16 July 1960, Lt. Colonel Paavo D. Carlson was designated Authorized Representative of the Contracting Officer by Colonel H. G. Woodbury, Corps of Engineers, District Engineer, on all contracts for which his predecessor, Colonel Hammond, had served as Contracting Officer.

By letter dated 16 July 1960, Mr. Brummette was designated authorized representative of the Contracting Officer by Colonel Woodbury, District Engineer, on all contracts for which his predecessor, Colonel Hammond, had served as Contracting Officer and under the same terms.

By letter dated 11 August 1960, Lt. Colonel Paavo D. Carlson was designated Authorized Representative of the Contracting Officer for Contract DA-5697 by J. M. Frassrand, Lt. Colonel, Corps of Engineers, Contracting Officer, Omaha District.

Colonel Carlin H. Whitesell, Deputy Commander for Titan I, CEBMCO, was designated Contracting Officer by Brigadier General A. C. Welling, Special Order 45, OCE, dated 12 August 1960.

By letter dated 11 September 1960, from General Welling, CEBMCO, Colonel Carlin H. Whitesell was designated Contracting Officer and Successor Contracting Officer.

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Letter dated 30 September 1960 from Omaha District Office to Mr. Brummette indicated that authorization as representative of Contracting Officer in letters dated 11 June 1959 and 6 August 1959 would be applicable on or after 1 October 1960 to those contracts in the Denver Area which remained under the jurisdiction of the U. S. Army Engineer District, Omaha, Letter signed by Colonel Frassrand, Contracting Officer.

Letter dated 30 September 1960 from Omaha District Office, signed by Colonel Woodbury, designated Mr. Brummette as Authorized Representative of Contracting Officer in accordance with letters dated 13 April 1959 and 16 July 1960 on or after 1 October 1960 to those contracts in the Denver Area which remained under the jurisdiction of the U. S. Army Engineer District, Omaha.

Letter from Omaha District Officer dated 30 September 1960, Lt. Colonel J. M. Frassrand, Contracting Officer to Lt. Colonel Paavo D. Carlson revoking designation of authorized representative of Contracting Officer for the purpose of supervision and inspection of all work under Contract DA-5697 which was designated by letter dated 11 August 1959.

Letter dated 30 September 1960 from Omaha District, Colonel H. G. Woodbury, District Engineer, Contracting Officer to Lt. Colonel Paavo D. Carlson, indicating that authorization as Authorized Representative of the Contracting Officer would only be applicable on or after 1 October 1960 to those contracts in the Denver Area which remained under the jurisdiction of the U. S. Army Engineer District, Omaha.

Letter 30 September 1960 from Colonel H. G. Woodbury, Jr. to Lt.

Colonel Carlson revoking Contracting Officer Authority, COB 30 September 1960, which was delegated in letters dated 13 April 1960 and 16 July 1960.

By letter dated 1 October 1960 from Colonel C. H. Whitesell, Lt. Colonel Carlson was designated Successor Contracting Officer for Contracts DA-5558, DA-5654, DA-6125, DA-6160, and DA-6311.

By letter dated 17 October 1960 from Colonel Whitesell, Lt. Colonel Carlson's Contracting Officer Authority was amended to require prior approval by the Titan I Director for those modifications involving acceleration to buy back time, time extensions, and those affecting other Titan I construction sites.

By letter dated 1 March 1961 from Department of the Army signed by Major General Keith R. Barney, Deputy Chief of Engineers for Construction, Colonel Joe A. Clema was delegated Contracting Officer for Lowry Area.

By letter dated 1 March 1961 from Colonel Whitesell, Colonel Clema's Contracting Officer's Authority as designated by General Barney was limited to existing contracts and new contracts subject to specific approval by the Titan I Director. Colonel Clema's authority also required prior approval by the Titan I Director for modifications involving acceleration to buy back time, time extensions, and those affecting other Titan I construction sites.

By letter dated 1 March 1961 from Colonel Whitesell to Lt. Colonel

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Carlson, Successor Contracting Officer authority which was delegated in letter dated 1 October 1960 was revoked effective 1 March 1961.

By letter dated 9 March 1961 from Colonel Clema to Major George W. Keyes, Lowry Area, delegation as Authorized Representative of the Contracting Officer for Contracts DA-5558 and DA-5654 was granted.

By letter dated 20 March 1961 from Colonel Clema, Captain William P. Rorabaugh, Lowry Area, was designated Authorized Representative of the Contracting Officer for Contracts DA-5558 and DA-5654 for the purpose of implementing General Provision 9 (Inspection) of subject contracts.

Contract DA-7113 was awarded on 31 July 1961 with Colonel J. J. Haley Omaha District as Contracting Officer. By letter dated 4 August 1961 from Omaha District, Colonel Haley designated Colonel Clema as Successor Contracting Officer for Contract DA-7113.

By letter dated 11 August 1961 from Colonel Clema, Mr. Robert H. Brown was designated Authorized Representative of the Contracting Officer for Contracts DA-5558, DA-5654, and DA-7113 with authority to approve interim and final "as-built" drawings.

By letter dated 11 September 1961 from Colonel Clema, Mr. Brown was designated Authorized Representative of the Contracting Officer for Contracts DA-5558, DA-5654, and DA-7113 with authority to approve shop drawings.

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