$\qquad$

DEPARTMENT OF THE AIR FORCE HEADQUARTERS UNITED STATES AIR FORCE WASHINGTON 25, D.C.


Mr. George V. Rickel
1368 Huntington Turnpike
Trumbull 18, Conn.
$1508 C 1956$
Dear Mr. Rickel:
This is to acknowledge receipt of your letter of 4 December 1955 referring to the construction of the Texas Towers.

Your suggestion for construction of the foundations for these structures has been reviewed and careful consideration and study given to it.

It should be noted that a substantial portion of the cost of these facilities is for electronic and communication equipment as well as for adequate housing of operating personnel.

Design and construction of these important parts of the continental air defense operated by the Air Force was entrusted to engineers most qualified in this work. All the work is being accomplished under the guidance of the Bureau of Yards and Docks, Department of the Navy.

The Air Force is always interested in new ideas for the construction of its facilities. However, evaluation of your proposal indicates that considerable time would be involved and numerous logistic problems could be encountered. Construction could not be accomplished withisthe time allotted.

Your interest in behalf of the Air Force is appreciated.
Sincerely yours,


DISTRIBUTION:
Coord Cy-CIE-1A/M
Cmbk Cy-CIE-EE/ST
R/F Cy-CIE-E
R/F Cy-CIE-EE/ST Stayback-CIE-EE/ST



Dear Mr. Chadbourn:
Reierence is made to your letter of 7 October 1955 concerning the "Bayley Texas Fower" and the brochure furnished to the Department of the Air Porce for evaluation.

The baylay brochure will be eveluated by the Department of the Air Force and its construction agent, the Bureau of Yards and Docks, Department of the Navy. You will be informed of the results of this eveluation upon completion.

## Sincerely,

(Sigued)
JOHIN M. FERRT
Speoial Assistant for Installations

## N. Ph1lip E H . Chadbourn

Green Valley Farm
Hyattstown, Maryland

NOTE: No major change in context. Previous coordinations remain valid.
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Walter g housa
4 Cod vBAy

DISTRIBUTION: AFCIE-CS COMEBACK
$-A F C I E-1 A M$ COORD CY
AFCVC - File Cy SAFIE - Ofe of Sign SAFIE - File Cy AFCIE-CS - R/F AFCIE-CS - Stayback

Maj Vandegrift

4. Hilly ti. Chadbotrne
men valley Fam
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er Ir e isedbolazma
reference ta mate to your lotion of $\gamma$ coblober 2955 encentins the "agley leas Toter", brochure formiatied 60 the Depurtiont of the Air Force ion evaluation.

The Bayle broquare will 2 be evaluated by the wequirtient of the Ais Force and the cornervation a, ont for this project the Dureall, Tens and Docks miked States ifyog. You will se intoned of the results d this evaluation es poon as possible after euspletion.

Sincerely,
(emo for Record: The brochure referenced in 1 lr . Chadbourn's letter was forwarded to Cambridge Lab's by PSAD as they considered the evaluation to be a development Process and not an construction methods evaluation. AFORD is taking necessary action to have brochure returned fran Cambridge Lab's to AFCIE at which tine it will be forwarded to Bureau Docks for Engineering analysis, a final rely to 1 H . Chadbourns letter will be prepared at that time.

Coors:


Coord By CIE-CS AFCIE-CS Pile LA: Comeback CTE-CS Stayback

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Green Valley Farm Hyattatown Maryland

7 October 1955
Hon．Donald A．queries，
Secretary of the Air Force，
Pentagon，Washington，D．C．
Dear Mr．Secretary：－
While the enclosed copy of my letter of even date to Colonel ニ．A．Friediander of the Air Research and Development Commend In Baltimore is almost self－axplanatory there remain two angles this then ＂Texas Tower＂situation which I feel you should know about．Therefore I take the liberty of describing them ti you．in briefest fashion．

In the first place，＇r．v．i．D．彐ayley is a modest man＇of science like yourself．He has devoted a life time $i o$ inventing，perfecting and applying hydredynamio principles all over the world．He invented a dry－ dock which is in operation in many parts；his scientific vitae would fill many pages．For twelve years he developed what has come to be known as a Texas Tower＂．He has spent many thousands of dollars on model testing plants and the invention is thoroughly patented．Being a retiring and modest character ho doesn＇t know how to get to first base in Washington． He is convinced that the＂Texas Tower＂presently being set up off Cape Cod is off on the wrong foot singe it hasn＇t enough weight at the bottom，to over simplify a very complex problem．

In the second place I come into the picture as a private citizen With no financial interest in the outcome．My interest is purely that of national defence and the fir Force＇s interest therein．In fact I was commissioned in the air Force in 1918 （In Billy Mitchell＇s time）．I am even now one or your boys＇nolding a responsible job with Air Force sech Pity Service，（AFSSOP），Office of Production at arlington isl Station under a splendid bose，colonel George R．Ronka．Should your office want any information beyond that which is conveyed in my letter to colonel Friedlander，䗑 phone at Arlington tall is JAckaon 5－5800，extension 314.

What brings we to the point of writing to you ie recent reports in tho press that several more＇Towers＇of the Cape Cod type are envisaged for the near future．It is my feeling that the Air Force and Yards and Docks should at least have a good look at the＂Bayley Tower＂before committing itself further to a type which has demonstrable scientific deficiencies which were foreseen and overcome in the gayley invention e some years ago．You，of course，have the qualified personnel who can get to the bottom of the delay in Ealilmore and establish the true merits of the opposing theories．

My satisfaction in this matter w he be fold；the hope that the Air Force will wind up with the very best product for our defence and that，by acting effectively now it may avoid a gratuitous congressional investigation later on．

In closing，way I express the tremendous gratification that hundred of my oollea gueqa share with me in having an eminent man of science at the＇stick＇of our grand old Air Force？

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Dexy S2e
Juat क aronh azo today. 7 sentadber. Wrote to you w inform

 dosalwir bo jolonsl jozdon fould and Livolonel tourao tatza of your organieatzon on 25 August 1955.

I xa etili waltirg to hear fros one of ths partios concarned

 angluaarb on cias meriva of uns "Uaydey Toker" as oompared wo the one ूow betng Bat up off Cape Cod, plaeze ict the ut Jown the folionint ODEarveclusa for ahat 2ñy aay be worth.
 *ore 2 Lhs PaEB2m Ghif in the n*ar fubure. Sofore salling he told


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 you. e crubsd to do 90 stetidre that $2 \Omega$ business erery kiock is a boosi
 pssctios aith tho "Cape Jot Tower" that thera is not anough welght at tha bothon (thia, as you will rocogniza, ij zy own cilie way of axpreaning a conpilcarod roblac in hytro-dynasice).

In the leht of the foratolne.. 10 home that Lhe sir:orce will be
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## 120 CT 1966

 VAGHIGOUN 25 T 6

SUNJ.or: Aranefor and roceptance of Fexsa Sowers

1. Reference is sade to telephone converasation between Gaptain Glaris and the Tirector of Conetruation, this Hesiquarters, 10 October 1955.
2. It is requestes that norian transfer and acceptence procedure outlined in AFR 88-9 be followed in traneferring fexas Sowers fron Bureau, Yards and Tocics to the using agency. Jecessary copies of the transfer locusents (TA 五e Porm 290) vill be made avsilaule so the construction agency by the USAJ instaliations Representative offioe, Hew nsland Region, 857 Commonvenith iverue, Boston, Mass.

FOR ME GEIIF OF SEATV:

GILBERT T. PERRI M
Colonsl, U. S. Ais Fores Military Assistant Construction Division ACS/L Directorate of congtruction, $\mathrm{cos} / \mathrm{I}$

COORD: AFCIB-CS




AFCIE-CS/LtColCa 1dwe 11/mol/71975 Wrtn 7Sep55


7 SEP 1955
A) vikons
 WASELNGPOII 25 D. U.

SIBJ u2: Advance Advertisement for Additional Toxas


1. Reforence:
E. Setter, Bur eau of Yards is Tocks U-270A/ản:vvh Al6ol, "Ruzas Towers", Funds for Construction of, undated, to USAP;
b. Air Porce memorandwn AFCII-CS, TMEAS TOWYRS, T1-1 and T-3, lated 30 June 1955:
c. Lotter Jurcan Yards de Tocics G 270A/Gas:vfp Al6-1, TXAS Toutres TM-1 and TM-3
 Sovers", Funds for construction of, dated 18 Aurust 1955.
2. It is requested that inediate action bo taicon to edvertise for the construation of three (j) aliftional Noxas Lowers (Lios. 4, 3 and 1). Biis shouli be solicited in suan a manner that oniy Towers 4 and 3 can be swarded, in accordance with the operstional requirements, if costs (as reflected by the bicis) shouls exceod preaent authority and availibility of funds.
3. Imaediate action is being taicen to eccure apportionnent of additional iunts to perait award in accordance with the sbove.
```
FON TH2 UH12F OY STAMY:
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PAUL C. LROWN
Colonel, U. S. Air Force
Chlof, Cowstruction Division
ACS/I

COORD: AFCIE-CS
$\qquad$
Heralolithe


Office of the Chief of Engineers, Washington 25, D. C.
26 August 1955
TO: Chief of Staff, U. S. Air Force
Attention: Assistant Chief of Staff, Installations
Directorate of Construction

1. Inclosed reproducible print of Standard Beacon Platform for Water Tower, drawing No. 86-16-08, is furnished for information and record.
2. Safety features mentioned in preceding indorsement have been incorporated in the basic design.

FOR THE CHIEF OF ENGINEERS:

1 Incl:
w/d 2 incl - 1 and 2
Added 1 incl:
3. Dig. 86-16-08

I. O. THCRLEY, JR.

Acting Chief, Engineering Division Military Construction

BMGBA(26 May 1956) 2nd Ind SUBJBCT: Stendard Beacon Platform for Water Tower:
offlise of the Chief of Bnginears, Washington 25, D. C. 26 August 1955

## TO: Chief of Staff, U. S. Air Forge <br> Attention: Assistant Chief of Staff, Installations Directorate of Construotion

1. Inolosed reproduoible print of Standard Beacon Platforn for Water Tower, dreaing No. 86-16-08, is furnished for information and reoord.
2. Safety fortures mentioned in preceding indorsoment have been ineorporated in the basio design.

FOR THE CHIES OF BNGINEKRS:

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1 Inol:
w/a 2 inol - 1 and 2
Added 1 inel:
3. Dwg. 86-16-08
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I. O. THGRLY, JR.

Aoting Chief, Engineoring Divislan Military Construetion

Basic Ltr fr OCE, subj: Standard Beacon Platform for Water Towers, dtd 26 May 1955

27 JUN 1985
AFCIE-EE/V lst Ind
Dept of the Air Force, His USAF, Washington 25, D. C.
TO: Chief of Engineers, Department of the Arry, Washington 25, D. C.

1. The beacon platform as such, shown on drawing $67 \dot{1}-139$, appears to be adequate for the purpose intended. Changes in the rotating beacon since 1931 are insufficient to warrant changes in platform requirements.
2. Current ground safety rules of the USAF require that the vertical ladder be provided with an enclosing basket similar to that shown on the attached plan sheets Nos. E 3000. The inclined ladder will require handrails.

2 Incls

1. $n / c$

Added 1 incl
2. Dwg E 3000

SUBJECT: Standard Beacon Platform for Water Towers.

Chief of Staff, U. S. Air Force
Attention: Assistant Chief of Staff, Installations Directorate of Construction

1. Inclosed for your conments and/or approval is a print of subject facility, plan number 671-139, dated 2 October 1931.
2. This drawing will be revised and identified as No. 86-16-08. Any changes desired by your headquarters, due to now critoria having been developed since 1931, will be considered for incorporation on the new drawing.
3. An early reply would be appreciated due to demand for prints of this drewing from the field.

FOR THE CHIEF OF ENGI EERS:

1 Incl:
1 Print
INCL REC
IN CTE - $/$ / $/ \mathrm{M}$


Chlef, Engineering Division
Military Construction

AFCIE-EE/ST/Mr Westrich/ed/75038/26 JUL 55
 installations, atd 18 J20 1955

ACI - $\mathrm{BE} / \mathrm{SI}$
lst Ind
§ AUG 1955

1) pesptant of the in Force, Hesdquartere United states A ir force, isalinton 25 , C.

20: Comamder, ieablesi if Cowand, Langloy iff Force Dase, Va STTN: AL/N

1. This headquartera interpones no objection to the uae of sereve or plete type patent sachors for subject inatallations provided anchor ace equivalent to that shown on draulng A8 $36-16-13$ is fuxnished. Tovars foe Bicay installstions nust be rigidly bpacod as eny vavering of the towor ulll trananit srronooue aziwith reatings to drarath.
2. Conorete phor type anchors ere Inditented on drandig AF 86-16-13 beosuse of thoir univerasi appllastion. serew or plate type patant enchors sannot reatily be obteined outside the fone of the Intemior.
3. Lramins $: 1-36-16-13$ all1 de ravised at an early date to luelude the optional use of screw or plate type petent suchors of appropriate size.


$M / R-A F C I E-E A / S$ will have dwg AF-86-16-13 revised. Telephone coordination rec'd fr lir. Hench (OCE) and Mr. Watson (AACS) 25 Jul 55.

AIW

DISTRIBUTION:
Coord Cy-CIE-1A/M
$\mathrm{Cmbk} \mathrm{Cy}-\mathrm{CIE}-\mathrm{FE} / \mathrm{ST}$
$\mathrm{R} / \mathrm{F} \quad$ Cy-CIE-E
$\mathrm{R} / \mathrm{F} \quad \mathrm{Cy}$-CIE-EE $/ \mathrm{ST}$
CC'S: AFCIE-EA
AFCIE-CS/C



AI /N
$: 8.101 .1955$
SUBJBCT: Tower Anchors, AN/UPN-3, JACAl Installations

TO: Assistant Chief of Staff, Installations Headquarters USAF
Washington 25, D.C.

1. It is recommended that screw or plate type patent anchors, without the concrete pier, be used in lieu of the anchors shown on Drawing AF -8 $6-16-13$ for subject installations.
2. Studar screw type anchors are now being used by the Air Force to guy receiver, transadtter and other antennas. Ho trouble or failures have been experienced.
3. The holding strengths of the screw anchors vary from 4,500 to 12,500 pounds in average soil. This should be ample to guy the towers, It is believed the holding strength of the 12,500 pound screw anchor is greater than that of the concrete pier types installed in disturbed earth. Should there be any doubt as to the adequacy of the screw type anchor the plate type is recommended. The plate type anchor has an area from nitty to four hundred square inches. The concrete pier type anchor has an area of two hundred and forty-four square inches.
4. Both type patent anchors are stock items with electrical supply houses and are readily installed. Considerable saving will result from this change in type of anchors to be used.

FOR THE COMMANDER:

AFCIE-CS/LtColCaldwell/mol/71975
Reilrtn 30 Jun 55

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\therefore E=/ A M \text { fris } 3-z
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APGIT-GS




1. Reference your letter, subject "Texas Comers", Funds for Constriction of, lated 24 June 1955.
2. This Hicadquartors does not concur in advertising $2-1$ and T2-3 for bid on 5 July 1955 as proposed in paragraph 2 of above referenced letter. Funds to construct $N-1$ and $N-3$ are contained in the FY 1956 Military Construction Program. When the authorization and appropriation bills Lave progressed to the point there congressional enactment into law seems assured, authorization to advertise in advance of receipt of funds will be favorably considered.
3. Fth reference to the question ia paragraph 3, as soon es final determination is made your headquarters will be informed. in the meantime, design should continue.
4. In accordance with telephone conversation between ropresentatives of your office and this Headquarters, action will be taken to provide necessary additional fum is for T-2 prior to 31 August 1955 as requested in paragraph 4 of referenced letter. It is requested that a current woricinc estimate of funds needed for Ti -2 be furnished this Headquarters as of 31 July 1955.

FOR TIL CHIMP OP SAFE:

$\mathrm{M} / \mathrm{R}$ : In addition to the reason stated in para 2 abv for not advertising for bid on 5 Jul 55, AFOOP-OP-D on 28 Jun 55 queried ADC to investigate the requiremont for TI-1. Further, at a ADDRD Briefing for Mr. Talbot relative to advantages of TP vs picket ships, Mr. Talbot requested that construction of add towers be held-

in abeyance pending ford
his consideration APCIE-0S of the problem. Come back expected to arrive at a back decision ola 12 Jul 55.
$\qquad$
W. R. IEONHABD

Colonel. vial,
 Colonel. USAY


## DEPARTMENT OF THE NAVY

BUREAU OF YARDS AND DOCKS
WASHINGTON 25, D.C.

From: Chief, Bureau of Yards and Docks
To: Headquarters, U. S. Air Foree, Washington 25, D. C. Special Projects, Construction Division Directorate of Construction, AGS/F

Subj: "Texas Towers"; Funds for construction of
Ref:
(a) BUDOCKS Itr C-271C/VD:vfp A16-1/Texas Towers of 18 May 1955 to USAF ACS/F

1. The Department of the Air Foree has informally advised this Bureau that availability of funds for construction of Texas Towers TT-1 (Caches Ledge) and TT-3 (Nantucket Shoals) is dependent on the passage of the FY1956 Appropriations Bill.
2. Under these circumstances Air Force concurrence is requested in this Bureau's proposal to advertise for construction of these two towers on 5 July 1955 , with bids to be received on 1 Septermber. Latest estimates indicate that funds required to finance award, adninistrative costs and contingencies will be as follows:

$$
\begin{array}{lr}
\text { TT-1 (Caches Ledge) } & \$ 8,350,000 \\
\text { TT-3 (Nantucket Shoals) } & 9,700,000
\end{array}
$$

3. Information is also requested regarding informal advice that the Air Force is reconsidering the necessity for construction of Texas Towers TP-4 (Off New York) and/or TT-5 (Browns Bank). Design of these platforms is being actively pursued with bid advertising scheduled for approxinately 1 August 1955. Current working estimates for these towers are:

$$
\begin{array}{lr}
\text { TT-4 (Off New Yorik) } & \$ 9,500,000 \\
\text { TT-5 (Browns Bank) } & 9,500,000
\end{array}
$$

4. The recent mishap in connection with the launching of TT-2, together with higher than expected change order costs, indicate the inadequacy of the nominal contingency amount requested in reference (a). At the present time no funds are available to finance anticipated change order requiraments or payment for danage to contractor's facilities in the event of an unfavorable decision in connection with the launching difficulty. Additional contingency funds for construction of TT-2 in the anount of $\$ 500,000$ are accordingly requested. This will bring the total contingency anount to $\$ 700,000$ or approximately $7 \%$ of the total contract price.
5. In view of the proximity of the proposed advertising date for Texas Towers TT-1 and TT-3, a reply to paragraph 2 by return endorsement is requested.
Mm. A
Aby

AFCIT-CS
YTMORAIDUM FOR DIRECTOR OF OPERATIONS, DCS/O
SUBJECT: (ThaI) Texas Towers - Construction

1. The construction contract for TY -2, Georges Bank, was let during December 1954, and the hull was launched at Quincy, Massachusetts, during the week of 15 May 1955. The BOD for this facility is now acheduled for September 1955.
2. The design and construction agency, Bullocks, has reported that design for the remaining programmed towers will be completed in accordane with the following schedule:

| TT-1 (Cashes Ledge) | 5 July 55 |
| :--- | ---: |
| TT-3 (Nantucket Shoal) | 5 July 55 |
| TT-4 (Unnamed Shoal) | 22 July 55 |
| TT-5 (Browns Bank) | 22 July 55 |

3. The above design schedule will permit advertising for bids in August and contract awards in September 1955.
4. It has been indicated at informal conferences that revised plans for coverage in this area eliminate the requirement for one or mare of the towers. Request this office be advised of the firm requirement for Texas Towers to permit timely funding and construction programing.
n)whial E . Lsoneako

Colonel, U. 8. Air Force
Deputy Director of Construction
Assistant Cuter of Staff, Installations


3UsJrom: Design of Texas Tovers - Nodifiontione Thereto

| me: | USAF Installations Representative Ofilce | Tate: <br> homo 年o. |
| :---: | :---: | :---: |
|  | Iew ngland Hegion |  |
|  | 357 Goxacnwealth Ave. |  |
|  | Joston 15. Kass |  |


the ahanges and aedifications are concurred in by this Headeuarters.


Pre/km
1 June 1955
SUBJECT: Design of Texss Towers - Modifications Thereto
MEHORANDUK: Asst. Chief of Staff, Installations, APCIE-CSR

1. Transmittad herewith is copy of lstter fron Oiflcerin Charge of Construction, Texae Towers, Pirst Neval District, dated 18 May 2955, with inclosures of preliminary A/E Drawiags.
2. Your corments and/or recomendations are requested as soon as practicable.

Incl. 2
1.Prints (Prel. $A / E$ dwgs) 2.Ltr. as above

PAUL R. KNICHI
Capt. USAF
OIC Instls. Reprs. Offlce
New England Region

SUBJBGT: Supply Ship for Texas Towers
20: Director of ransportation, AFFN: ANAPPPD TANE:

1. It is believed that representatives from your office and the Directorate of Logistics lang have visited the Navy Construction Office and obtained all necessary information since your memorandum was written.
2. Fuel storage has been increased by $100-120,000$ gallons, and the vertical instance between low water and the main dock is approximately eight-five (85) feet.
3. The proposed use of helicopters to logistically support these towers appears to be the most favorable and economical.

1 Incl
n/c


GILBERT T. PERE
Colonel, U. S. Alt Bones
Executive
Construction Division


CORD: APCIB-CS

祭

## APCIR-C


a. T. PERRY
Dol, Isar

AFMIP-PD
MEMCRANDUM FCR DIRECTOR OF OPERATIONS, DCS/O
ATTN: AFOOPMOPD
ASSISTANT POR LOGISTIC PLAANS, DCS/M
ATTM: APMLP-PL
ASSISTANT CHIEF OF STAFF, INSTALLATIONS
ATTN: APCIB-C/SR
IN TURN

## SuBJBCT: Supply Ship for Texas Towers

1. A review of the attached correspondence indicates that some thought is being given to the use of helieopters for trensporting personnel between the Texas Towers and shore points. The ADC operations plen calls for the use of surface transportation for this job.
2. The provision of an ocean vessel capable of lifting the correct amounts and types of eargo and personnel between the shore and the Texas Towers will be a lengthy process. If we are to have a suitable vessel ready by the time the first Tower becomes operational we must develop a specific requirement in the immediate future.
3. We would like to know whether or not the supply ship should be equipped to handle passengers. If so, then we would like to know the numbers of passengers to be carried at any one time so that adequate aeconmodations may be provided.
4. We would also like to know the vertical distance between low water and the main deck of each tower so that adequate liquid eargo pumping facilities may be provided aboard the supply ship.

## 1 Incl <br> B/L ir AFMIP-PD, same subj, dtd 10 Jan 55 to ADC w/1st Ind dtd 8 Feb 55,w/1 Inal

[^0]
ADDRESS REPLY TO:

AF INSTALLATIONS REPRESENTATIVE NEW ENGLAND REGION
857 COMMONWEALTH AVENUE
BOSTON 15. MASS.
REFER TO FILE NO. NER-AF PRK/JW
MEMORANDUM FOR ASST. CHIEF OF STAFF, INSTALLATIONS, HQ. USAF ATTENTION: AFCIE-CSR

SUBJSGT: Partial Assumption of Contractor Risks, Texas Tower

Forwarded for your information.

1 Incl. (in dup)
Cyl tr fro
last Naval District
dad 15 Mar 55
$\left(1 \mathrm{cy} / \mathrm{h} / \mathrm{C} 1 E-c S^{\circ}\right)$


ALFRED C. ANDERSON Chief Civilian Asst.
Dep. OIC Instils. Repro. Office New England Region

1 I MAR 195s

From opficer in charge
fos Chice. buroen of Yards and jecies
Vist Vistrict Whic vorke officor, "inst Kavel Disturlot
Subjs Feras Towne - partinl asscoption of contractor Fisky

1. In macortamen at th verbel diractive tron the criof of inureang it
 of a portion of the sontrestaria riuk in toving aso ersetinc swbjact tovecre.
2. Aviles been reselved from a gualified insureace brokest that ooverteg to the towe itmelf will eost about 5150,000 per tower for $\$ 3,000,000$ coverage wih $\$ 25,000$ detuartible per secidert. It is furthes underateod that the Deione Comporation narmaliy does not insure the first $\$ 35,000$ in ogder to to reduce his Inwurance prenturis. Tharefore, it is reocmanded that tho governsent inelf ine 10 a a 11 fareze to the tower in exeses of 525,000 nerr accichant tharuby saving $\$ 750,000$ in insurance prentras on the five towars.
3. filstnation or partial covarage of insurance for third narty Lishlility is not recossumiod.
4. It is considared that the ontractors will inolude in thair bida oiseable contingoncies to cover eocts of dalaya rosulting from ainorival poer wather conditions. Dalays in jecking witat arrival at the ersction site oould be very oestily. Therefore, it is rwoursended thent live goverument reisturse the ecmiructer by change order for $40 \%$ of his direst out-of-poedsat eapeneis at the areotion site chargsebie to notprodactive pariode resulting from eartanded periads of poer seather. Thds would require legal derinition, but tontetively, poor veather


 areluite ovarhasd, prafit, rental or corntructor urned aquipxant, etc. It is considerad inportant that the contractor asswo a part of this rict even though he will wrobably cover it with a ountincuncy iteem. 'is as wqtion wili ails nate posg1ble unpecesasary stomasgas at covermment exemee $t c$ mend ore productive weather.

## SUBJECT: Supply Ship for Texas Towers

## Assistant Chief of Staff, Installations ATTN: AFCIE-CS <br> Director of Transportation ATTN: ARITP-PD <br> NAR $241955^{\circ}$

IN TURN
NEMO NO. 3
AFMLP-PL-US/Lt Col Bradley/dm 778648

1. This office recommends that Texas Tower personnel be transported by helicopter. Further, we recommend that airlift be used for resupply of cargo other than water and diesel fuel to the first Tower (one Tower 1 Sept 1955-1 Sept 1956). The two H21B's mentioned in Memo 2 can carry this cargo as well as the personnel.
2. It is understood that diesel fuel storage will be increased by $100-120,000$ gallons, and that equipment for routine distillation of water is being installed. This will permit occasional resupply (of fluel, and perhaps some water) by a standard commercial tanker.
3. During the first $6-8$ months of supporting the first Tower, the helicopter operation will be thoroughly tested. The operation can then be evaluated and compared with surface resupply of dry cargo in order to decide on providing a ship, or about four additional H21B's (10 instead of 6) to continue air resupply to all five Towers.

## 1 Incl <br> $\mathrm{n} / \mathrm{c}$

ArCIS-CS/LtColCrossey/mol/71975
Wrtn 2 Feb 55
$\overbrace{0}=2 \rightarrow R$
3 FEB 1955

Lear Adaires. R. 2. 8. Stradis
U \& Coset sal Joodatic Survey
Thepartiant of Commerge
Hashington 25, 5. C.
Toes Adarimai Stulde:
Reference your jether of 10 Jeunasy 1953 , requestine inforiation as to the possibility of using the "Texae Tovers" to obtbin data on bahavior of tiobes.

The U \& Wavy yydrograghie Grfiee has also reguested the ses of thess towuts to buquire data om Farlous ogeenograghio purametsrs. whe kir forco has \&-7en appreval to the hyurocrapitis fiflae inlicuting thet eufilicieat epace and power womld De availnble to support their

 who wouk be tatexeotest in this type of date. A aoopsrative progroun whers the yarlous parsichpating agencien could cocbine shoir roguiremento vcoll result in a mors eooncaloul investionsion.

If is tugcestel that your oftios sontact Comsunder . Robinsen,
 273, is orler chat your requiroments nay be incladei in this proepan,

Whan all the requirements are inown for thie procren they will be

 ydrocrmpie office.

## Sincerely,

COORD: APCIL-CS


IEE B. WASHROUFITE
A.jor ce U. S. Nir Porvo

 the rolationship of the tido on the contiriental shalf With that inshora; and of pertioular bevefit to your. aperation would fuyaish uver the years the variation botiveen the elevation of thoplatiorus dind mean saa zevel. As you probnbly fuon con level has beon, Fifing sloviy but noticeably alozs tho Atiantig. This has boen brought out by our presant hetronk of tides statlons loditud along our coasts, priparlily in ponowhat protected places.

Data or the benvior of trdes, variachon in water tompeyature and decsity, ne getragnt riow pro dosired, particulxaly now with increasod interestin tho devalopment of the netural resotrees of the contingontal sholf.

> 10 January 1955
> Yajor Genaral Loo E. Nashburm
> U. S. Ar Force
> Page two

Our prosent flles of procassad data collectad by the Coast and Goonet $c$ Survey on tides sicys our coasts, cuments on Georgos iank: and at scattorad points alcns the sholit aro ueed ax ons:valy by Dofonsa Department contractors, such as तoods Iola Ocganographic Instituto, in ressarch etudios.

Using the standard automatic recordine instruments of tio Coast and Gaodetic Survoy 21t.ie tip and space are progutrot to obtain tho dastrod obsorvations; witich are processsd by the Coast and Gondetic Jurvey. However, if a prosran were to bo undurtalian sore provision for instriling the instrumonts woild be mauirod boforo the platforms aro complotel.

An exprassion of your opiriton on this matter would do appreciatgd.

Sincorely yours,


| AFCIB | 1 |
| :--- | :--- |
| AFPTR | 2 |
| AFDRD | 3 |
| AFOOP | 4 |
| AFCCS | 5 |
| SAFCC | 6 |
| OSAF | 7 |



> COORDINATION COCRDTNATION COORDINATIOS COORDINATIOK APPROVAL GOORDINATIOH SIGRATURE

Real Betate Division

## COMFIDFNTHAN

AFCIE-ROO-7/Najor MacGhee/77617/jfm/Wrtn: 20 Dec 54
Rewrtn: 27 Dec 54

SUBNECT: Designation of Arees of the Outer Continental Shelf Heeded for llationsl Defense

1. Reference is made to Memorandum from the orfice, Seeretary of Defense, subject: "Designation of Areas of the Outer Continental Shelf Needed for National Defense," dated 12 October 1954.
2. Inclosed is a list of areas of the Outer Continental Shelf required by the Depertment of the air Force for national defense puryoses.
3. Section I of the inclosure lists those areas presently being used for: sir-to-air gunnery ranges, air-to-air rocketry ranges, bonbing renges, missile ranges and apecial purpose ranges.
4. Section II of the inclosure lists those ranges which are either in the process of expansion or are programmed for expansion to meet anticipated future requirements.
5. Section III of the inclosure lists the approximate geographical coordinates of "Texas Tower" sites. The exact coordinates of these facilities can not be determined until caissons are sunk preparatory to final conetruetion. The coordinates furnished herewith are based upon the best information available at this time. The area required for designation in this case is a circle with a five mile radius around each tower.
6. Pursuant to the provisions of Public Lav 212, 83rd Congress, it is requested thet the aresis listed in Section I, II and III be designated as needed in the national defomse. It is essential that these arees be restricted from exploration, conmercial production and exploitation except when temporarily waived by the Seeretary of the Air Force sa being in the national interest and not profudiefal to the alssion of the Air Force.

Then Incl. no. $\mathcal{H}$ sec § is (are) withdrawn

Hemo for the $A$ sst Sec of Defense (PeI), Subj: Designation of Areas of the Outer Continental Shelf Needed for National Defense (Cont ${ }^{\mathrm{d}}$ )
7. The Air Force is presently making a utilization study of the overall range problem the fingl results of which should be available some time the increased ranges of weapons systems, the limited size and high value of land emphasiee the desirability of overwater ranges whereover possible. These factors plus the ever increasing training requirements of the Air Force indicate thet an overall Departmental review of overwater range distribution and control mey be desirable in the not too distant future.

(s1gned)<br>jomi M. FERRY<br>ancint for Instellation

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ee: AFCIB
AFPTR
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When Incl. no. (-Sec ${ }^{3}$ is (are) withdram or not attaghed, the classification of centidertia on this correspondence will be cancelled in accordance with par 25 e, AFR 205-1.
 COMPRetryw

Wemo for the Asst See of Defonse, Subj: Designation of Areas of
the Outer Continental Shelf Meeded for National Defense (Cont ed)
7. The Alr Force is presently meling a utiligation study of the overall range problem, the final resulta of whith shoult be available some time next year. The theressed apeeds of aireraft, the incres ibtramgee- of reapons aystems, the 11 udted size and high velue of land emphasige bliv-degirebility of overwater ranges whereever possible. Thoee factors pluserthe future expansion of the Air Porce indicate thist on overell Depertmeitini, reviem of overwater renge distribition and control may be desirable-4a the not to distsint future.

## ```ANes?``` <br> Then Inc1. no. Coles ?

## antidential

will be cancellod in accordence kl
par 25 e, AFR 205-1.

## 1 Inel a/s

eet AFCIE
AFPIR AFDRD APOOP
MEMO FOR RECORD: By Memo dtd 12 Oct 54 OSD req that three SerFices furnish OSD requirements for areas of Outer Continental Shelf needed for national Defense purposes so that these areas could be designated as national defense areas \& restricted from exploration, commercial exploitation and production when such afces SAPCG OSAF OFC OF STC OSAF FIIE COPY apCIECI The focal point of interest was in the Gulf of Mex. \& the tideland oil area with its oil, natural gas \& sulphur resources. AFCIE req that AFPTR; AFDRD \& AFOOP furnish AFCIE with present \& future AF requirements for areas of the Outer Continental Shelf in order that a nsolidated reply might be furnished OSD by 1 Dec 54. Replies were ree from AFOOP dtd $\approx$ Nov, AFDRD dtd 29 Nov, AFPTR'dtd 19 Nov. Inadequate info prevented preparation of final reply until after Tuxas Tower site doordinates could be resolved. Coordinates \& size of area to be designated in Connection $\mathbf{W} /$ Texas Tower sites was obtained informally from Col. Parson AFOOP-OP-D \& It. Col. Crossey AFCIE-C/S on 20 Dec 54. AFOOP plans to hold an opns conference on range problems during Jan 55. At the conclusion of that confer. AFCIE will undertake to clarify the confusion presently existing in range real estate, prom viding $A F O O P$ \& representatiges of maj commands are able to clear up the confusion relative to existing ranges \& who exercigies jurisdiction over them. It should be noted that the Novy has almost complete control over both the eastern \& west coast seaboards \& is moving to grab all that area in the Gulf not req'ed for designation under PL 212 by the AF. The unsuitability of current continentalapanges due to the greater eequirements of modern weapon systems and the high value of Jand in most continental shelf ranges, especially in the New England \& west coast area NOTRz, Mr. Norton, OSD, informally advised Col. Price that for the purpose of this action use justification lould be adequate, ego gumery ranges, bombing ranges, Texas-Tower sitto.



AFCIE/Gen Washbourne/d1/76381/8Dec54


8 December 1954

Me. W. M. Horn
Newport News Shipuilding and Dry Dock Company
Newport News, Viginia
Dear Mr. Horn:
Receipt is tknowledged of your letter of December 3, 1954, expressing an invest in a sub-contract for Texas Towers for the Air Force.

The Bureau ( Yards and Docks, U. S. Navy is handling the design and constriction of these units for the Air Force. It is suggested that ye interest in the fabrication of the steel work for these units 1 communicated to the Public Works Office, First Naval District, Eton, /massachusetts.

Sincerely,

LEE B. WASHBCURIE Major General, USAF Assistant Chief of Staff, Installations

Major General Lee B. Washburn
Ass't. Chief of Staff for Installations
for the United States Air Force
Washington, D. C.
Gentlemen:
We read with interest the article on the proposed Radar Warning Platforms for the Continental Air Defense Command, and we note that it is the thought of the Air Force to ask tenders from specialized engineering contractors for these units.

Inasmuch as we do not intend to submit a prime bid on the fabrication, assembly and erection of these units, we would appreciate receiving a list of those contractors who will receive requests for prime bids. We may be able to assist as a sub-contractor in the fabrication of the steel work for these units.

Your advice in this matter will be appreciated.
Yours very truly,
NEWPORT NEWS SHIPBUILDING AND DRY DOCK COMPANY
By -
W. M. Horn

Sales Department


SUBJeCT: (Unel) Projects SAOE and TaKas TUWEAS - Critical List
2. Request your office initiate action to place the following projects on the critical. List:
a. SASY (Somi-Automatic Ground Tavirormont) (team Lnolassifind) fomarly known as Lincoln Transition Systems.

This Headquarters issued Design Guidance to AFIA NAR on 20 July 2954. Form 378 in amount of $\$ 15,250,000$ was issued to Commander, As r Materiel Coosuand on 25 pot 2554. This 378 authorized obligations for the following:
(1) Construction of technical facilities at jiocuire AFB, New York and Stewart APB, low York!
(2) Design and construction of technical facilities at Syracuse AsS, the $\overline{\mathrm{I}}$.
(3) Inspection service at inquire AFB, Syracuse ARS, N.I. and Stewart $A F B$, H. $\mathbb{I}$.
(4) Design of technical facilities at It Lea, Vacs Brunswick NAS, lie. and Ft Custer, mich.

AuG has been designated as executive agency for this project. A Joint Project orion under the jurisdiction of A.C has bon established to coordinate all the facets of the project. A separate SAOS section has been established in the AFIR NAR ofilce to monitor the construction of these facilities.

## b. TXAS TCWERS (tom unclassified)

This in adquarters Issued advanos planning directive to bureau of Yards \& Docks on 8 . ar 1954 authorizing proparation of contract plans and specifications for the towns. Form 378 in amount of 111,023,000 will be issued to BuLlocks prior to 3 Dec 1954 for the following:
(1) Construction of Sites TT-2 and TT-3
(2) Design of Sites TT-1, TT-5, TT-4

## Classification canceled or changed to:

By Augend Col Cotexith Deelevenfuo 28 p 61


## AFOIE-CS/MajorLittle/mol/71975

Wrtn 30 Nov 54
Unclecifuefontormphat


Guluoks has been designated as construction agency and A7lakilk will monitor this project. DuDocics and Air Fore has agreed to (s construeton schedule which provides for oupletion of one (1) Tower during CI 1955 and four (4) Towers during GY 1956.
2. It Colonel A. B. Parsons, $A F O O P-O P / D$, roux 80951 , telephone: 73456 and Lt Colonel J. I. Crossly, AFGIT-CS, rocs 5D,31, tolephone: 71975 will famish additional information on above projects as required.
3. liequest this office be Included for coordination on all action papers poittaining to these projects and be furnished information copies of all action papers, reports, etc.

HAROLD C. WHIT
Colon $1, ~ S A F$
Chief, Special Projnots Branch
-onatruction Division
Directorate of Construction, ACS/I

CORD: AFCIE-CS


 c. w. mames $v$ - -15

Tottleer outhor


1. A discussion was held this date with AFDRD representative Colonel Rockwell and AFOIN-XI representative It Col Perlberg pertaining to status of action on project RAG 10P. Follaring points were noted or emphasized as requiring further action:
a. It Col Perlberg stated that the project has been presented for JCS approval, and that he will take necessary action for project to be included in programoing guidance documente to give it some official status.
b. A memorandum was prepared by lir. Hoover (DCS/Gomptroller) for General Bogart to present to Secretary of Defense, requesting $\$ 10,000,000$ in contingency funds to cover complete project. It is unknown at this time if these funds are applicable to Prip requirements. AFCIE-CS will follow-up on authorization and funding for this project.
c. Budget estimate prepared by General Blectric indicates a PWP fund requirenent as follows:

| (1) Initial cost | - | $\$ 550,000$ |
| :--- | ---: | ---: |
| (2) Iransportation | - | 96,000 |
| (3) Erection \& Installation - | $\mathbf{4 9 5 , 0 0 0}$ |  |

$10 \%$ Contingency
TOTAL $\frac{114,000}{\$ 1,255,000}$
d. Lt Col Perlberg presented a schedule which showed the desired phasing of equiprent delivery and installation with timing of construction operations. A copy is to be furnished this office as basis for establishing a construction schedule with the construction agency.
e. General Electric's study on this project provides basie data for preparation of design guidance to field agency. Lt Col Perlberg will provide additional G.E. contacts on generators, etc. AFCIB-CS will take immediate steps to issue design guidance instructions. Target date is 3 Decenber 1954.

Hemo for Record, 30 Nov 54, Subj: Status of Action - Proj RAG mop
f. Site survey team is expected to retum to Washington by 3 Dec 54. Confidential Hessage Q5681, 27 Kov 54, from the survey team, stated that all survey tean members and representatives of Jhinat concur that JCA is the logical construction ageney, and further recommend immediate release of construction funds.
g. Design and Construction Channels:
(1) USAFE has AFIF responsibilities for subject area. Issue design guidance to USAFE.
(2) JCA is design and construction agency through CTMCBUR. 3781 s will be issued to CINCEUR.
(3) Adequate design funds are in hands of JCA to carry out design.
h. Coordinate all project action papers with AFOIN, AFIRD, and AFCIB-CO.
i. A query was raised coneeming a similar Z.I. site. It Col Perlberg indicated that operational requirement was so phased that project could be included in FY 56 program. Lt Col Perlberg was requested to contact Hr . Ulinski, ARCTE-II, to insure that the project is included in the IV 56 program.

HAROLD C. WHITE
Colonel, USAF
Chief, Special Projects Branch
Construction Division
Directorate of Construction, ACS/I

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AFCIB-II
AFCIE-C
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1. Reference is nade to a discubaion held in my offlee on 23 Koverabrer 1954 with Aindral J. R. Forry of Bulocks eonewrning the schedule of eonstruetion for Texas Towers.
2. By latter of 22 Ootopber 2956 on this subject, the dit oree requeated, as an inmediate urgent requirement, the oonstruction of twa (2) torera during CI 1955. Following a digousel on of the Air Forco requiranent for Texas Tower type faellittes daring cr 2955 and anticipated design and construetion difrleulties, enusarated by Buresu of Tards and Dooks repreaentatives, $1 t$ was coneluded to be in the best intersat of she sarFiees and agreed by those prosems (sabjeet to telephone oonfirnation by jeparticent of the Navy wich wsa recel ved on 24 Niovember 1954) that:
3. The Air Poree acoepts a deaign and construction achetule wilah will provids one (i) sampleted facility in CY 1955 with four (4) allil tional towara to be completed in cy 1956.
b. The Afr larce recognizes the difilicultise that sey arise in maintaining this sehedila in an umproven construction Cevelognont field, howevar, the Atr Force is propared to secept the additional cost incurred in attionpting to maintain this priority sehedule.
4. A conatruetion directive covaring the eonstruction of this facility will be iasued prior to 3 Dacomber 1954. The kir fores will procure and install all teehnicel and oosmmioatione egaipmont, less genecrators. Generators will be procured by the Ais Farce and instsiled by the oonstruetion ageney. All ot har conatruetion for the faclility will be provided by the eonstruetion aganey.
(Signed)
JOHN K. PERRY


SIPSN: Sohedule of Conatrubtion for texas Towems
3. Reforenco ia naie to a discussion hela in ay office on 23 Movenber 1954 sis th Adxival J . K. Ferry of suigecias sonserning the schedule of eonatruction for Texas Towers.
2. Iy letter of 22 Cotober 1954 on this subject, the air tarce requested, as an fimolitate urgent requirenont, the conatruction of two (2) towera during CI 1955. Fallowing a diacussion of the sir Fciree raquirement for Taxas Tower type facilities during or 1955 and anticipated deaign ani econtruetion diffleulitiss, enumerated by Bureau of Terds and Doeks Fepresentatives, it was oonoluded to be in tha best interast of the serviees and agreed by those prosuat (aibjeet to telephone consirrastion by epartnent of the liavy wifich was reeefved an $2 /$ Mownaber 1954) that:
a. The Afr Ferce accepts a dasl gn and construction solvehile which will provide one (3) caspleted fachlity in CY 2955 With four (4) adutitional temers to be oompleted in CY 1756.
be The Alf Foree recogniges the afriteultise that nay arise in waintsining thie seheselo in an anproven construction develapenent field, however, thin atr foree fs prepared to eacept the aditional oost inewrrsd in atteopting to mointain this prearity sohedule.
3. A eomstrustion dixeotive ouvaring the onntruction of this facllity will be issuad prior to 3 Degember 1954. The Afr Foree will procure and install all teelnical and communications equipaent, 2 ess egenerators. Genarmiora will be proenursd by the air Varce and installed by the eonstruetion agancy. All other construction for the fandility will be providied by the eonstruetion
eganey.


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T:AS RUBLMS
 B), preseata two (2) schedalns of conatruotion for the Iive (5) Fexas Toumpe. Echodule ags

 calis for explntlon of two (2) of the tomere diarlus dino - bugust 2955, belanoe in 2956. The lavy cotiline racious reatons why ocm intion of aty of then tovere in 1955 in not reoconimatict.

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b. The she operating grogran phases pereosuel into theae faclutities atarting in ootober 2955 vith sull ogcapangy on sin operating basis during; duiy, hafast and septemiby 1956.
 bumurs ape expinted.
d. iy building at 2 nsat twe (2) of the terers in 2555, moperience weli be cainnd which wil2 perilt isprovenent on tho 2956 inataj2ations.
e. Two (2) ants of taporary Inge, st a cont of $81 / 2$ aillion aach, reanirend in 1955 san to mused during the 1956 inatallations.
f. Hy opooting twe (2) of tho townra in 2955 and throe (3) in 1956, the loed on tho Air Foroo in instaliing anal teating of electronie equiganot will be diefributed.

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Weshington 25, II. C.
3. Anperonoe is arade to your letver cated 20 iotobes 1854 , subjnots
 inclosures $/ 1$ and $/ 2$ tharmbo.
2. The problon apess outzinod in your intier in adiering to Sohelule "fy" for corabriction of Texas Towere are zeeognised as probsble trouble spotes. hionver, the $A 1 r$ orco has on tannodiate urgent requiment for conetruotion of at lanat two (2) of the tovers during oalondar year 1955. thereform, after carmful oonesderation of $=2.2$ the froctors involved, it is requestod that your plaming be predicatod on Schecule "gos and that every mifort be made to oamplete thn tosmers at lantureket and Georges isank duriug calmader yres 1955.
3. Tho progress of design, construction, outfitting ami arection will be alosely followed during the bext fers sonthes. If at any thae it appeare that factore boyoud your control aril aake 1955 eang $e t$ iven of the two (2) tows re not ceasible, the eocstriotion schedule nay be modilied by auteal. agrenamet sccoriincly.
4. hotion is belne teken to aocume lax adiate mlense of funds manired to pre it advertising and swand of gontracts for ccnotructlon of the twe (2) temmre peferred to above, and for eanplation of design on the meining three.
BOA sge whick of sTAF:
c. PRATT BROMN
p Mor General, U. S. Air Force
A~sistant Chief of Staff Installations

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## , masesen HOI $10-5$ <br> AIR <br> STAFF SUMMARY <br> SHEET



SUBJECT TEXAS TONLRS

## SUMMARY

1. Letter from Department of the Navy (Dureau of Yards \& Docks) 20 October 1954, (Tab B), presents two (2) schedules of construction for the five (5) Texas Towers. Schedule "A" reconmended by Bureau of Yards \& Docks calls for completion of all five (5) towers during
period Lay - August 1956. Schedule "B", submitted at the request of the Air Force, calls for canpletion of two (2) of the towers during June - August 1955, balance in 1956. The Navy outlines various reasons why completion of any of the towers in 1955 is not recanmended.
2. By attached letter, ( Tab A), the Navy is requested to adhers to Schedule "B" with periodic reexamination of all factors to determine if we should proceed as planned. Factors in this decision are as follows:
a. There is an innediate Air Force requirement for a seaward extension of the Air Defense Radar Net to afford coverage of strategic areas not presently covered.
b. The USAF operating program phases personnel into these facilities starting in October 1955 with full occupancy on an operating basis during July, August and September 1956.
c. Flectronic equipment will be available January 1955 for installation as the -ors are completed.
d. By building at least two (2) of the towers in 1955, experience will be gained which will permit improvenent on the 1956 installations.
e. Two (2) sets of temporary legs, at a cost of $\$ 1 / 2 \mathrm{million}$ each, required in 1955 can be reused during the 1956 installations.
f. By erecting two (2) of the towers in 1955 and three (3) in 1956, the load on the Air Force in installing and testing of electronic equipnent will be distributed.
g. Contingency factors outlined by Bureau of Yards \& Docks could just as easily affect Schedule "A" as Schedule "B". For exanple, if Schedule "A" is used and bad weather prevails during the sumer of 1956, the possibility of getting none of the facilities prior to calendar year 1957 is apparent.

AF HQ -50 (Rev 21 JuTe 48) DEPARTMENT OF THE AIR FORCE

| TO | ROUTE | DESIRED ACTION | INITIALS | OFFICE OF PREPARATION |  |
| :---: | :--- | :--- | :--- | :--- | :--- |
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SUBJECT TEXAS TONALS (Continued)
SUMMARY

## RECOILLNDATION:

( 3. It is recommended that $\operatorname{Tab} A$ be signed and dispatched.
W.E. Lenchaud

2 Incl

1. Prop lir to BuYer Tab A
2. It fran Buyid 20 Oct 54 Tab B

WILTTMA E. LEONARD
C. $\quad$, U. S. Air Fore

1. Director of Ca......ion
1..---tiont Chief of Stair, A...tallations

Erom: Chief, Bureau of Yards and Docks
To: Department of the Air Force
Subj: TEXAS TOWERS Design and construction of
Ref: (a) USAF ltr APOAI dtd 8 Nar 1954
(b) Conference of 19 Oct btm representatives of BUDOCKS and HDETAS USAF

Encl: (1) Schedule "A"
(2) Schedule " ${ }^{(1)}$

1. By reference (a) the Department of the Air Force requested this Dureau to proceed with the preparation of plans and specifications for construction
of the subject project.
2. A feasibility report has recently been completed and tentatively approved by Department of the Air Force representatives. A thorough technical review of this feasibility report, by BuDocks in consultation with the Architect-Ingineer representatives, has been made. Based upon this review a schedule which follows sound established design and construction procedures has been prepared providing for erection of all towers during the sumer of 1956. This schedule is outlined in enclosure I fomarded herewith.
3. This schedule (enclosure 1) conterplates the completion of plans and specifications for all towers by 1 May 1955. Iump sum bids for construction of the towers would be received fron selected bidders lists and awards would be made on four towers prior to 1 IIay and on the fifth tower prior to 15 June 1955 under contracts which would stipulate completion dates not later than 1 August 1956. This schedule allowe several weeks for partial installation by the Air Force of electronic equipment during the dockside outfitting period, with completion to be accomplisied at the sites Leter the towers have been completely erected and outfitted. The schedule is designed to take full advantage of lower costs resulting from concurrent construction of identical platforms and onshore or dockside outfitting and installation of electronic equipment. The schedule is considered realistic and provides optimum completion dates from the standpoint of econory, thoroughness of design and good construction practice.
4. By reference (b) Air Force representatives expressed desire for a plan that would envisace completion of two towers during the surmer of 1955, with the remaining towers to be completed in the summer of 1956.

## C-270A/GCE:VfD; fib

M 1.
Accordingly, enclosure 2 has been prepared to indicate maximum tire allocations which could be a ssigned to various phases of work in order to permit erection of two towers prior to 10 August 1955. To attempt to meet this schedule, highly accelerated and abnormal design, construction and bidding procedures would be required, with no assurance that they would result in construction completion by the date desired. As exanples:
(a) It would be necessary to imediately advertise for bids on fabrication and installation of the structures on the basis of the limited information contained in the Feasibility Report.
(b) The fabrication portion of the bid would be based on an estimated tonnage with adjustment at a later date.
(c) Outfitting mioht have to be added to the contract by change order upon completion of plans and specifications.
(d) Contractors, both design and construction, would denand sizeable contingencies for overtime work.
(e) Additional costs would be involved in the dovetailing of M:E design with the preparation of fabricators shop drawings.
(f) Contractors would include cost contingencies to cover possible necessity for major outfitting at the sites after erection in lieu of complete outfitting at dockside prior to erection.
(g) All electronic equipnent installation by the Air Force would have to be accomplished at the sites, rather than on shore.
(h) Thorough review and double checiring of the unique design of the structure would not be possible
(i) Any number of difficulties such as strikes, umpual weather, transportation problems, etc. could occur and cause delays. The probability of such delays is completely realistic and, even if of only two to four weeks, would make adherence to the outlined schedule irpossible. This would result in the paynent of premiun prices for completion on desired dates with the benefit not being actually realized. That premiun is estimated at $30 \%$.
5. The Bureau accordingly considers that it would be extremely unwise to adopt a construction schedule similar to enclosure (2) and feels that it can only accept the responsibility for the foll design and construction of this project on basis of a schedule along the lines of enclosure (1). The unusual design and construction requirenents inherent in this operation which is completely different in scope and character from any previously undertaken similar marine work dictates engineering prudence and no variation from sound practice.

AFCIE-EA/S/Mr Roehr/wmw/73541 Wren 6 Oct 54


120 OT 1954
Industrial Machine and Tool Company ATTE: NF. Donald H. Roberts
615 Worth Sheridan Road Tulsa 1, Oxclehoma

Gentlemen:
Your letter of September 13, 1954, to the Commanding General, Headquarters U. S. Air Force, requesting an opportunity to partiedpate in the proposed construction program for "Texas Towers," hes been referred to this office for reply.

Design and construction of these contemplated facilities is performed for the Air Force by the Bureau of Yards and Docks, First Naval District, as contreet construction agent.

It is, therefore, suggested that you refer inquiries to the above -mentioned First Havel District, Navy Mulling, $495 \mathrm{~s}_{\text {um er }}$ Street, Boston 10, Massachusetts.

Your interest in this matter is greatly appreciated.

## Sincerely,

C. W. HARRIS

Deputy Chief, Engineering Division
Directorate of Construction
Assistant Chief of Staff, Installations
M/R: Fy b/1tr did 13 Sep fr above company retained in FA File.

COORDINATION:
AFCIE-EA
AFCIE-E
AtAAaris

## 2鳁NDUSTRIAL M畳ACHINE \& TOOL CO.

615 N. SHERIDAN ROAD TULSA 1. OKLAHOMA TELEPHONE 8-3328

September 13, 1954

## Commanding General

Headquarters U. S. Air Force
Pentagon Building
Washington 25, D. C.

## Gentlemen:

We recently have been advised through public releases of the anticipated radar tower fabrication and installation program that the Air Force will be initiating in the near future.

It is requested that we be provided with whatever information you have available at this time pertaining to the design, fabrication and installation of these radar towers known as "Texas Towers". We have done quite a design study on this type of structure and feel that we have a qualified staff to assist or to do preliminary design on this program if same is available. In addition thereto, we have complete facilities for the fabrication of these units, and we would certainly appreciate the opportunity of working with the Air Force and the United States Government on a project of this nature and magnitude.

If there is a formal application form required to receive bid sets or this data, it is requested that this information be forwarded to the undersigned so that they can be completed and our firm placed in a position to receive bid sets, engineering data, etc., pertaining to your program.

Thanking you in advance for your cooperation and assistance,

## Yours very truly,

INDUSTRIAL MACHINE \& TOOL CO.


```
ArCiL-us/Ltuolurossey/mol/71975
    drta 30 Sep 54
```

MTHORAMTUM POR APGI I-

## SURJIUR: Fexas Towers Preli-inary Plans

1. Request that your Division make an inmeilate engineering reviev of the atteched plans for the ebove referenced subject. This reviev should be accomplished prior to $A$ October 2954 st which time representatives from your Division and Gonstruction Tivision will depart for Boston to sttend a conference with Departient of the Navy and Architectursil Ingineering representatives.
2. A mesting is now schaduled at 0900 hours, 5 October 1954, AFIRO IDP, Boston. Hequest adequate representation from your office attend this meeting in orter that decisions may be made at this meeting. It is expected that, at the conclusion of this mesting, Department of the Lavy will be able to proceed with detailed plans and specifications for these towers. Contract avard is estimated to be 1 Jamary 1955, construction to be accomplished on shore during spring of 1955 and erection on aite in survaer of 1955.
```
1 Incl
    Sct dwgs 1-10
    Toxas Lowers
```



1. A. shaicis

Lit Colonel, USAF
Chief, Special rojecte branch construction Tivision
Directorate of Ucnstruction, ACS/I

AROIL-CS/LtColCrossey/mol/71975 Wrtn 22 Sep 54

## 24 SEP <br> 1952

## APCISOCS

SUBVILC2: General Security Classification - Project Texas formers

TO:
Commander
Air Defense Command
Int Air Force Base
Colorado Springs, Colorado
in order to clarify numerous inquiries and to establish a policy on the general security classification of Project Texas Towers, the attached copy of a letter to Bureau of Yards a Ticks, Tepertment of the Heavy, dated 17 September 1954, (Incl 1) is for warded for your information and guidance.

BY ORDER OF THE CHIT OP SNAP:

1 Incl
By Lur as cited
DISTRIBUTION:
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Home, Z. Y.
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First Laval District
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2. A. Swank
t. Colonel, U. S. Air Force
Cl. of. Special Projects Branch

Cons -na th Division
arpotc|e


## 1

1

First laval Dist, DB-300, Subject: HOy-2761: Project Zexac 'Cowers
ADIIIS C-2 (6 Aug 54) Sd. Ind -1 - 18054

H2 AIR DEFEHSE COAMD, Int Air Force Base, Colorado Springs, Colorado
TO: Assistant Chief of Staff, Installations, Headquarters USAP, Washington 25, D. C.

This headquarters concurs with the recomendation for declassification of information pertaining to Texas Towers, to the extent defined by the District Public Works Officer, First laval District, as outlined in basic later. It is requested that you initiate directives to all echelons and agencies to accomplish the required declassification.

FOR TIL COICADR:


Info cys
PWO First laval Dist
APIR-ILER
Conker EADF

# HO ADC AAG <br> DISPATCHED <br> Sep 151339 94 

1954 SEP $20 \quad 1204$

ASST. CHIEF OF STAFF
INSTALLATIONS

HQ EASTERN AIR DEFENSE FORCE, Stewart Air Force Base, Newburgh, New York
T0: Commander, Air Defense Command, Ant Air Force Base, Colorado Springs, Colorado

1. This headquarters concurs in principle with the proposal outlined in the basic letter.
2. Although the provisions of $A D C R 205-5$ are believed appropriate in determining security classification pertaining to Texas Tower installations, a review of paragraph $4 a(1)$ as pertains to the purpose and location does not appear applicable in view of the widespread publicity already afforded this project.
3. Request this headquarters be advised of the current classification policies as pertains to various elements of the Texas Towers project.

FOR THE COMMANDER:


# B/L Dist. Pub. Wks fice, First Naval District, Roston, Mass. 

 NERAF LABR/LM ( 6 Auc. 1954) let Ind. UCAF Instls. Repr. Office, NED, Boston, Mass. 10 Auc. 1954 TO: Commander, Eastern Air Defense Fonce, Stevart AFP, Newburt, ii. .1. Concur in desirability
2. Request cloarmee throut hom Comand and Public Relation channels.

BV ODEE O OF THE CHI OF OR STAF:

Fosec: pWo First Nav. Jist.

DISTRICT PUBLIC WORKS OFFICE
FIRST NAVAL DISTRICT
NAVY BUILDING

Address reply to District Public Works Officer First Naval District

495 SUMMER STREET, BOSTON 10, MASS. and refer to:
DB-300 RSS: mg
$\mathrm{NOy}-82761$

From: District Public Works Officer, First Naval District
To: Lt. Col. L. B. Reppert, USAF IRO NED, Representative's Office, Officer in Charge of Installations, U. S. Army Engineers, 857 Commonweal th Avenue, Boston

Subj: NOy-82761: Project Texas Towers

1. In view of the widespread publicity regarding subject structures containe in recent newspaper articles and magazines, this office considers that the "Secret" classification should be confined solely to the type and capabilities of equipment to be installed. The articles, in general, point out that a chain of offshore radar warning stations called "Texas Towers" will be built as an extension to the system now in existence from Alaska to Greenland. They further state that the towers will be linked to shore-based warning stations.
2. It is requested that necessary steps be taken to declassify all perions of the project except that noted above.


AFUII-CS/LtColUrossey/mol/71975 Wrtn 14 Sep 54

17 SEP 1954
AYCIZ-CS
SUbJLCT: Gensral Security Classification - Project Texas Towers

TO: Bureau of Yarde \& Pocics
ATEF: C-270
Department of the Niavy
Vashington 25, T. G.

1. In reference to your inquiry on classification of construction concorning Project Texas Towers the following policy should govern:
a. When the project is discussed without specificelly mentioning either the type of electronic gear, electronic coverage, the number of towers, and/or the genersl arsa covered, correspondence can be unclassified.
b. When the type of electronic equipment to be used on the tower is indicated, corresponience should be confidential unless specific equipsent requires a higher classification.
c. When the general electronic covarage is given, the correspondence should be classified secret.
2. It is quite difficult to specifically place a olassification on all facets concerning Fexas Towers as many individual elements in themselves are unclassified, however, the grouping of these elements can require classification. Por example, the locations of two sites would not be classified in themselves, but to state that they are adjacent vould show the possibility of a gap, thereby providing inforaation upon which to analyse the capability of this system which would require classification of confidential or higher.
3. Classification of correspondence relating to Fexas Fowers must necessarily be decided by the originator exevaising good judgment.

POR THE GHIET OP STAFP:


WIUTIAM E. LEONHARD
Colonel, U. S. Air Force
Deputy Director of Comstruction Assistant Chief of Staff, Installations


SHBJ Cl: (Uncl) AJad Prograa
fo: Dixactor of Operstions, rosgd:

1. Information concernins dosien and construation of facilitias lieted in paregragh 1 cowent 1 is outlined belev:
a. Low Altituade Gan 3h1er Madar
(2) tetion faken: the servicas of an $A / B$ fire to propare glans, specifications and soricing drawings for these Rocilities has been obtnined. Tasse plems should be available oy second cuartor in 2955, in Sime to seet the propesed schadule to stert construction durine thle periol. The chiof of agineere has been requested to assist itr Teienoe domand in oiting these facilizies.
(2) Action Contamplated: Providing the siting surveys vill ba accoaplithed as ochadulod, it is expected that COS 1111 proviAe conatraction of facilities as saheduled for all gites in the FY $55=56$ PMP, 125 and 100 sitas respeotively.
(3) Additionsi Information equirad: Griteris as to velght, size and powar required by the aquipment to be used for those facilitios. Sinos this information was not been furaishod it is coatamslatad the $/$ / selectsid along with representatives frow this Resdquartera will secure this inforation is the aear future.
(4) Zroblom Araas noountered: In addition to criteria montioned in paragraph 3 above, the rualization of completed site survoys upon which to bose derign and construction vill be a continuing problas.
b. Mard Phase iwomentation adar Procrean
(1) Action 2 gkaz: Deaign Guidamee issuod for twonty-five (25) third phase aobile altes as contaived in the IT 55 PaP. oas has beon reguestad to assivt ATC in the siting of thess frefilities.
(2) Action fonteaplatgd: 003 will conetruat these facilities uoon approval of the oite survey reports by this keadquarters. If the site ourvay roports are accosplishad ant approved as sciedulol, it is expectod that the conotruation of these 25 sites will mont the fargot date. in zinole


StBJ Co: (Uncl) AC3N Progron (Jontinue1)
b. Third Thase iugmentation Eadar roman (Continued)
(3) Inforantion lequired: Approval of Site Survey Reports.
(4) Eroblem Areas nocountersif: Telay in receiving site survey reports.
c. In lementation of jexas lovara
(1) Letion Taken: Tesign Guidance issued to Department of davy, Dureau Yarda \& Docks who, in tura, have auarded a contract to ma A/s firn to investigate and design thase five (S) sites. Preliminary dravings have Doon submitted to this Hoadquarters and vili be discussed at a conference at sATV, Steunart AF3, 23 July 2954.
(2) Action ontempiatod: it is anticipated that the desien of the rexss Cowers will be accomplishod by 1 Tecomber 1954. Constraction vill start on the superatructures ebout February 1955. lastellation ab the locations should becin aproxiataly Juae 1955 with the exception of the one (1) site off Xov York Gity whien is in deop wator. Thio sito praponted a fesican and conatruetion problew which hes not as yet been resolved.
(3) LAdithonat Infomation Koguired: Kazning, Locistic plans and type of commuicetion from site to shore.
(4) Problens arpas necuptored: The means of providing a site in 280 ft de th of wator is prosonting a major engineerins problem.
2. A series of Plald Conferences with AMT, GATS and ykTig are to be confuctas Auring first quartar, FY 1955. Siting, criteris, roal estate on design problems will be diecussel and resolved to tho createst possible axtent. These conferances will reveal adlitional inforation and problem arsas which will be furnisiod as apyropriate.


## M/R: Comments 2 thru 4 \& 6 are not applicable to this Directorate.

## WIILIAM E. LEONHARD

Colonel, U. S. Air Force
Deputy Director of Construction Assistant Chief of Staf?, Installations

AFCIB-C
ColBrown


Coordination Approval Stinature

Lt Col Crossay/ Wrtn: 27 Apr $54 / m o l / 72975$ Re-irtn: 29 Apr 54/Col Leonhard/cn/73311

Special Projecta Branch
Construction Division, Construction Diviaion,
D/Construetion, Acs/I

LuCOL J.L. Croesey 72975

3 MAY 195A

Texas Towars Construction

1. Adrial jeliy, Diractor of Conatruction, Ofilpt, Socretary of Defense, has if astod a sketch of the floor plan for the Texas Totuers. The mesorandum, as Tab "A", trangafts the roquested wrotoh and explains the cugrent staves for design for these towers.
macomaran 10 M :
2. It is recomended that the attached poworandum to the Drector of Construction, OSD ( Tab " $\mathrm{AN}^{\mathrm{N}}$ ) be signed by the Spocial Assletant for Instailations and dispatehed.
```
1 Inel
    *Tab a"
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## L. J. ERLER

Colonel, U. S. Ait Force
Director of Construction
Assistant Chief of Staff, Installations

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Cow dn. Cy - AFCIS
Cmbk Cy - AFCIE-CS
Stayback cy APCIE-CS
leading cy AFCIS--3
Offlice of Signature
ofice of Sec of N/S
OSAF piles
Gen Washbourne
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MAY 41954

MRYORAMDUN FOR THE DIRSGIOR OF CONSTRUCTION, OFFICE, SECRETARY OF DEFENSE
SUBJECT: Texas Towers Construction

1. As requested in your Memorandum of 16 April 1954, there is enclosed a copy of floor plan recently submitted to the Department of the liavy for guidance in the design of subject named facilities.
2. Design and construction responsibilities having been assigned to the Bureau of Yards and Docks, a meeting was held 12 and 13 April 1954, at the Headquarters, First Naval District regarding the design criteria to be used. In addition to this Headquarters, the Air Defense Command, the First Naval District, and the Architect-Mngineer retained by the Navy for this project were represented. The actual size of the tower structure will be determined by the Navy based upon criteria furnished at this meeting and other data to be developed.
3. Some reduction in area may result from the adoption of a square, rather than rectangular, platform but the ultimate area will be primarily dependent on the required spacing of the throe radomes. Our instructions to the Navy require the most economical type of structure capable of supporting the assigned mission which contemplates three large radomes and a heliport on the top deck. The area below the deck should accomodate thirty seven (37) Air Force personnel, power equipment, 30 -day supply storage and radio equipment. In addition this Headquarters has for consideration a Navy requirement for space to accomodate twenty ( 20 ) of their persomel and certain additional equipment.
(Signed)
JOHN M. FERRY
Social Assistant for Installations
Enclosure
Plan (2 pages)




## SUBJECT

## SUMMARY

- Aciaira: Jelly, Diracuor oi Construction, Of lice, Secreuary of Defense, has
rested a skeuci: o? the floor pin for the Texas Towers. The memorandum, as Tab mat, Transmits the requested sketch and explains the current status for design'for these towers.


## RECOH1NNDACION:

2. It is recommended that the attached memorandum to the Director of Construct
OSD (Tab "A") be signed by the Special Assistant for Installations and dispatched.


## I. J. BRLSR

1 Incl
Tr ab A"
Colonel, U. S. Air Force
Director of Construction
Assistant Chief of Staff, Installations

AFCI L-as/Lt Col Crossey/mbl/71975 Wrtn 27 Apr 54

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1 Inclosure
Memo for Sisnature
w/1 Inclosure, Tab A
c Coord Cy AFOIE-LAM Comeback wy APGIE-GS Ofc of Sige OUSAF OUSAF File Gy
AFCCS
AFCIE

OFFICE OF THE ASSISTANT SECRETARY OF DEFENSE WASHINGTON 25, D.C.




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ACS/I REFERRAL SLIP
DATE MAR 311954
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## AFCIE SUSPENSE

TO:

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| :---: | :---: | :---: |
| $1 \sqrt{\text { CIE-2 }}$ | -_CIE-3 | _CIE-4 |
| $2 \sqrt{C I E-P}$ | CIE-E | -CIE-A |
| _CIE-R | _CIE-C | _CIE-M |
|  | _CIE-H |  |

ATTPNTION:
FOR:
$\qquad$ Necessary or appropriate action
$\qquad$ In coordination with $\qquad$
Coordination and/or Comment
——Direct reply
$\qquad$ Prepare reply for signature in $\qquad$
1 Information
$\qquad$ File
Action has gone to $\qquad$
——Info has gone to $\qquad$
_ Return to ACS/I
—Monitor all aspects for ACS/I
Gen Washbourne has noted


ALBERT M. DOHERTY
Hajor, U. S. Air Force
Assistant Executive
Assistant Chief of Staff, Installations
(Uncl) Froject Sexas Towers
nirector of cperations, T.as/o

Threctorate of Construction, ACS/L
2. APR 195 C
$1 / 201 /$
71975

1. hequest your review and comsents on the attached letser frou fept. of the davy.
2. As this project is presently, being digicaed by the Havy for the Air jorce, it is inperative that a decision be maderan whethor apace for materiel and porsonnel for the liavy be provifed in these strictures.
3. The ingreased cost of design because of the incluaion of this additional space hould do neglifible and could be covered with our presently availeble deslen funds, although the cost of the sdditional construction ay be considerable and it is possible that the liavy will be requested to cite a source of funds if their request for space is approvec.
4. Nany ltems must be considered in regard to this ruquest such as prorating of cost of upseep and operation, comand Jurisdiction of the rite, etc.
5. A meeting vas held at ffice of First keval Tistrict, Eoston, Masa., 12 April 1954, with reprosentetives of this Hesdquarters, leyt. of the liavy and Anc to resolve poblass of design regarding these Fexas Powers. It wse decided at that time that the Levy ahould design for 31 AP permanent personnel and 6 AF transit personnel and that criteria to be need in the design such as water, messing, doaking, leundry, etc., vould be of Isvy stancarls.

## 

## Cいnel, U. S. Air Fore

- : Dtrector of Construction

> 1 Incl
> Ltr fra jept Havy 20Varyt
at otat hief of Stafe, Installations
ca: AFOAC


GOORDINATION:

- enclosure No. $\square$ is witharawn attached) the classificetion of respondenco Will bo canzellod - with par. 25e, AFR 205-1.


## AFCI B-C



WRAN 1 Ape 54
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(Uncl) Texas Towers
AFIRO NISD

AROLI-GS

Reference your message SETAR 3-1714. Copies of correspondence requested in referenced message are enclosed.

3 Incla

1. Itr to BUY\&e dtd 12 Jan 54
2. Herso fra BUY\&D dtd 19 Jan 54
3. Conf rpt-Texas Towers dtd 11rebSt

CHARLES C. IUTHAN
Lt. Colonel, U. S. Air Yarce
Executive, Constmation n+..t-4n
Directorate of Construction
absistant Chief of Statt? Inotallat fons

A. UI -
J.h.Grosseyth


AẺ VII

## DEPARTMENT OF THE AIR FORCE

Staff message division

(3) 73\&\$5 12
R. 2920352

HQ. USAF $\qquad$

TR USAFLRO NER ENGLAND DEV BSN
TO JEPYCYCOFS USAF THSKMC
THTO JEDEN/COK ADC ENTT AMA COLORADO SPRTNGS GOLO
JEDUP/VCOH AIR WATERIEL, COHAND URIGHT PATIERSOR AFB OHXO
JEPGFFCOH POIE AT DEPOS CRZFFSS AFE RONE NY
BEPW/CITET NAVAL OPERATIONS DEPT OF MANY WASHDC
BEPD/BUREAU OF SHIPS DEPT OF WAVY WASHDC
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CORS USAF UASHDC/FOR AFEIE C PD URIEM PATEASON ARB/FOR NCITC PD
GRTRFISS AFB/FOR WCOR PD USAFITO IMD 2 DD REOUEST THXS OTFICE BE
FURUTSIED CVS CORRESPOMDI:icE \& DFTA DEFENBED TO TM PAR 1 A CMH 13 ANB
 TEXAS TOWEAS UHQUOTE DTD y yHRCH 54 PD PRELTMZMAMY RPR PTEPARED BY ITMCOLI LAB DTD \& AUC F IS AVATLABIE TO THIS OTTICE PD UPOH RECEIPT OF REDGAEMGED DATA WMTEND TO ESTADLISH JOZMM CONFEMENGE TO PERMTT
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$29 / 2124$

## COMFIDENTAK

DEPARTMENT OF THE AIR FORCE STAFF MESSAGE DIVISION

CONFDDEMFLAZ PRIORITY

PARAPHRASE NOT P REQUIRED. NOTIFY CTYPTOCEEMTER BEFORE DECLASSIFYING

TO : COMAIRDETEON ENS APB COLO
NR : 53945 23 March 1954 (D2G 2309082)

## PERSONAL FROM <br> PERSONAL TO GHIDIAW FROM WHITE

Ref URMSGs ADHCR 08720 atc 17 Mar 54, ADHCR 0383 did 11 Mar 54, and Personal to Chidlav from White did 15 Mar 54, and UFMSG ADHCR 0433 dee 18 Mar 5h.

Just completed second reclaya to OSD on FY -55 Public Works Program. This reclema, as did the first, included essential ADC facilities expressed in your personal messages. Mr. Douglas and myself personally appeared before OSD to urge their approval of the minimum operational facilities sponsored for the FY-55 Public Writs Program. Even though every possible effort was made to secure their approval of these facilities, for reasons beyond control. of Air Stasis, OSD declined to approve all items requested. For instance, they did not allow: the ADC maintenance facilities program for Mcclellan nor did they approve the family housing at ADC bases. Te were able to secure approval on the following ADC Items which have now been reinstated in the FY -55 Public Works Programs:

Readiness Hangars

Lockboume
Wurtigmith
Bismark
K. I. Sawyer

26,800 sq. ft, hangar
14,000 sq. ft. "
 c. W. IH pIty hangar ft. shop

## COWFIEEWHAK <br> DEPARTMENT OF THE AIR FORCE STAFF MESSAGE DIVISION <br> outgoing classified message

GONPTDENTTAS
IRR : 53945 (cont'd)

Readiness Hengars (cont'd)

VeChord

Minn.-85. Fau:

Suffolk CO.

21,640 sq. ft. hanger $5,160 \mathrm{sq} . \mathrm{ft}$. shop

21,640 sq. Pt, hangar 5,160 sg. ft. shop
$21,640 \mathrm{sq}$. ft. hangar $5,1,60 \mathrm{so}$. ft. shop 2,733 sq. yd. access apron

Maintenance Hangare Duluth

Youngstown

Texas Tomers

21,640 sq. ft. hangar 5,160 sq. ft. shop 2,164 sq. yd. access apron
$21,640 \mathrm{sq}$. ftt. hangar 5,160 3q. ft. shop 2,500 3q. yd. access apron

Approval is granted for the inclusion in the FY-55 Authorization B111 of an ftem for Texas Towars in the amount of \$8 million. This item will be included in the overall line item for the Lincoln Transition System.

It is planed to resubmit as firm operational requirements 113 the FY-56 Public Worls Frogram, those 1 tems which falled to recelve OSD approval for $\operatorname{EI}-55$.

## CONEIRENTM

DEPARTMENT OF THE AIR FORCE STAFF MESSAGE DIVISION.
outgoing classified message
CONPIDEMTIAE.
NR : 53945 ( cont $^{1} \mathrm{~d}$ )

ORIGINATOR : GIE
DISMRTBUMTON: SVC

CAP OUT : 53945

COL W. E. LDONHARD/amh/73311
WRIN: 12 March 54

APOAI-C
15 Narch 2954

SUBJBCF: Design Instructions

T0: Chier, Burean of Yexds \& Dociss
Depertment of the Navy
Washington 25, D. C.
2. An unacceptable tive lag exists between the date funds are appropriated for Public Works construction and the date these programs are placed under contract. This delay is largely attributable to (1) the need to re-program funds before the program can be inplemented becauge of inadequate cost estimating in the initial program preparation, and (2) the late initiation of design in the program cycle.
2. Ietter, this Headquarters, subject "Preparation of Project Plaming Reports", this date, is designed to overcome the first probjem listed above. The purpose of this letter is to delegate to Air Force Installations Representatives the authority for issuing desien instructions to desien agencies, and to outline a procedure for inplementing this suthority as a means of overcouing the second obstacle cited above.
3. Effective imediately, this Headquarters will discontinue the preparation and issuance of detailed line stem design directives for all years programs worlawide. Instead, this Headquarters will:
a. For the FY-1955 and FY-1956 prograns, adivise the AFIRs, major commands and design agencies of the USAF Construction Progran, including real estate iteas, approved by the office, Secretary of Defense for submittal to the Congress, and identify the design agency for each line item.
b. For the FY-1954 and prior yeare prograns, furnish the APIRs, major comands and design agencies vith a consolidated listing of all projects included in current Air Force prograns.
c. Furnish the AFIRs, major comands and design agencies, general desigm criteria and standards, list of definitives and standard working drawings, and specific design guidance as may be necessary to insure compliance with program objectives.
d. Allocate advance planning funds to the design agencies ( $\mathrm{P}-313$ ), as necessary to accomplish authorized design.

B/L to Chief, Bureau of Yards \& Docks, Dept of Navy, Wash.,D.C., subject Design Instructions.
e. Advise the AFIRs, major comands and design agencies of changes in scope in all prograns, including real estate items, as a result of actions by the Congress or the Dejertment of Defense, changes in base utilization or other reasons.
f. Monitor for adherence to approved scope and technical adequacy, all design instructions issued by the APIRs.
4. Major conmands will promptly furnish siting, and spacific eriteria for non-standand itens to AFIRs as a basis for design instruction.
5. APIRs wil2 :
a. Screen listing of projects contained in current program for FY-1954 and prior, and insure that a valid deaign directive is in force for each line item not under contract.
b. Upon receipt of FY-1955 program, as approved by the Orfice, Secretary of Defense, screen design directives currently in effect for revisions and omissicns.
c. Upon receipt of FY-1956 programs, as approved by the orfice, Secretary of Defonse, screen project planning reports on file for required changes.
d. Following sereening in sub-paragraphs $a, b$ and $e$ above, issue appropriate instructions, including zequents for recil estate planning reports, to the design agoney ut Heval District level to design projects in accordance with designated scope and criteria. Design will be in accordance with Air Force outilne specifications and will not exceed the scope apecifically authorized by this Headquarters, except for nominal changes (not to exceed 10\%) to (1) adjust to a stapdand definitive or (2) meet special on-site conditions.
e. Forward two copies of all design instructions issued to this Headquarters, ATM: APOAI-C and APOAI-AE. Information cOpy will also be furnished to major corrand concerned.
f. Revise design instructions upon directions from this Headquarters to rerlect changes in approved seope and correct errors, omiasions and aviblguities.

## 6. Design agencies will:

a. Advise this Heedquarters of the need for advance planning funds ( $\mathrm{P}-313$ ) for accomplishrient of design.

B/L to Chief, Burean of Yards \& Docks, Dept of Mavy, Wash., D.C., subject: Desigen Inatructions.
b. Prepare preliminary and/or woricing âraoringa as requested by AFIRs in design instructions.
7. Current procedures vith respect to review and approvel of preliminary plans will contimue to apply.
8. Where an Air Force major cormand is designated the deaign agency, relationship of the AFIR to that comana and the procedure to be followed are identical with those in effect for design agancies outside the Air Force uniess specifically exempted by this Heedquarters.
9. Construction directives, program authorization vouchers (AF Forms 378) and budget allocations for construction will continue to be issued to construction agencies directiy from this Headquarters.
10. Previous instructions in conflict with the foregoing are rescinded.

POR THE CHIEF OF SLAFF

NIILIAM E. IEONHAEL
Coionel, USAF
Chief, Constr. DLviaian
Directorate of Inetallatians BCS/O


ANOAI

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2.) 3arch 1754

## Surpern: Dosiga Tnstructions

## TO: Chisf of lagingers

Deparement of the Ariz
Tashington 25, D.C

1. An vnaccoptable time lag axiste botwan the date fundo are appropris atiel for publlc \#oris construction and the dete these prograng ore placed (under convract. This delay is largely attributnble to (2) the need to rate progran fundis before the progran can bo implomented beceuse of 1nadeguate cosb octimating th the initial progrom urapuravion, and (2) the late ialitiam tion of design in the progrsu aycla.

Tetter, this Headquarters, subject spxeparation of proje ot phaments (epurts," tino date, 13 destgned to ovemonas the f1rst problan 210tod abovec Thes purpose of this lattor ia vo delegate to Atr Force instellations Fisprom som , tiven the authority for iaauing casign instructiona $6 e$ dasign rgencias and to outling a procetiare for inplementing thin mithority as a means of oparoonting the second obstacle cited aboven

Effective imediately, thia Headquarte-s will discontime the Frenaration and fasuance of detailod Iine them desicn directivas for uis

a. For the KY 55 end FY 56 progrems, advise the AFTRs, Major Conr mands and deuign agenctas of the USAF Conistruation Program, inozuding real estavo thems, approyed by the offlog, Secretar, of Defense for subuithil to the Congrass, and stontity the deek megenoy fom asph 1 Ine itean-
b. For the FI 54 and prior yearte programs flrmish the APPred, Ha jor Commands and desimn agsncies with a conisolidated listing of al2 pro jecta fnoluded in current Ais forca prograns.
C. Furnish to the AFIAs, Wajor Comeands and dasign agenoies, generat desien eriterfa and standards, Hsts of definitives and standard working dranirgs, and specific dasiom ruidance as may be neoassary to insure complisnce irith program offectives.
d. Allocate advence planning funds to tho design agencies (p-313), ea necestary to acconplish authorized dasign.
C. Advise the AfTRe, Mefor Commrita and design agenotes of chsigges In icope in all programs, including roel. estata Items, as a rosult of actions ty the Congress or the Dopartment of Dofense, changes in base utilisation or ovier reasons

SUETHET: Deaion Instractions

3. Where an Aln Force Major Comand is designatad the design agenoy, ralltionghtp of the AKXR to that comand and the procaduris to be followed are idontleal with those in effect for design egencies outside the $\mathrm{A} x$ Foros unlasa spectifiealiy exampted by this Headquarters.

> 9o Construction directives, progron authorlaation vouchors (AF Forns 378 and budget allosations for congtruction will continue to be issued to conebruction agencios directiy from this Headquartersa
10. Freviong instructions in conmict nith the foregoing aro resoindedo
FCR THE CHITF OF STAFF:

Ti. P. IEONHARD
Colone 2, USAF
Chief, Conatruotion Division
Directorate of Tnstailations, DCS/O

AMOAI- W
SU3J avi: (Unai) BY 1955 Advance Planning Tirective - iexas toudecs

TO: Whief, Bureau Yards क Nooks
Department of the liavy
dashington 25. J. 6.

1. lieferences:
a. USAF letter, subject: "(Uncl) Toxas Towers ${ }^{n}$, with brochure dated 12 January 1954;
b. (Secret) Buresu Yards is Doaks letter C-203E/ims 131, 29 January 1954 , to Iirectorate of Installations, Tis/O USNP.
2. As a part of the seaward exteneion of contiguous radar coverage of the U.S. Air Tefense System, there is a requirement for five (5) madar facilities identified as "iexas Towers". Subjuct to subsequent provisions of this directive, you are suthorized to proceed with the preparation of contract plans and specifications for these radar facilities. The site surveys, ocean floor and geolosical investigetion, desifn and preparation of contract dravings and specifications, cost estimates and all other phases of lesign necessary to provide complete bidding documents will be prepared.
3. General provisions:
a. Gurrent progedures and polloies relative to standards of construction, siting of facilities, approval of plans, specifications and coordination with agencies concerned will sovern the adminietration of this progran.
 upon reference la above and conclusions established by conference in this Headquarters, 5 February 1954, a report which has been furnished.
4. Speaial provisiona:
a. Preliainary pians and specifications will be subjeat to approval prior to proceeding with final drawinge for the purpose of establishing the actual scope of woric of these projects and deteraining the validity of the cometruction requirements.
D. A current working estiate for ench tower will be developed on the basis of the preliminary plans and apeaiflastions.


SUBJ II: (Uncl) $9 Y 1955$ Advance Planning Tireotive - Texan overs ( Continued)
4. Special provisions: (Continued)
c. The AF installations Representative, New agland Tivision, Corps of Mosineers, Department of the Amy, 857 Commonwealth Avenue, Boston 15 Mas., telephone: Algonquin 4-2050, Extension 35, is the Air force agency designated to monitor this project in accordance with Aㄱㅅ 93-17.
a. Technical radar plans and engineer assistance will be furnished by the Rome Air force Depot (KAB :MDNK) through Air Materiel command.
e. Joorilnate location and project number for each site is as follows:

Project Mo.


## Hame

Meshes Ledge
georges Shoal linntuciet Shoal
(Asia Rip)
Shoal (Unnamed)
Brown's Bank

Location

f. Additional specific design criteria will be furnished in the near future as it becomes available and is approved for utilization on this project by the Air Force.
5. Action has been initiated by this Headquarters to mage available to your office design funds in the amount of $\$ 200,000$.

FOR Th K air $\overrightarrow{3}$ OR STAFF:
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NILLTAM E. Ezongape Colonel, USAP
Chief, Constr. Division Directorate of Installations, DOS/0


A-10559

I/C White/AE/R/vhf/52641
12 Jan 54
19 JAN 1954

1. Informal discussions have been conducted between representative of this Headquarters and yo $r$ bureau concerning the design of certain off-shore facilities called "Texas Towers".
2. This lleadquarters believes that the design and sup revision of constr action can best be performed under your guidance and req eats that you indicate if you are desirous of prosecuting this work as outlined in the i closed brochure. The urgency of this program dictates that site surveys, soil investigations, design and preparation of constriction drawings, cost estivates and all other phases must be oo pleted in sufilaient time to permit construction during amender year 1955.
are in a positive
3. If you desire to undertake the work outlined above, it is requested that sou provide this headquarters with an estimate of plan ing funds required and a tine schedule of contemplated actions.

FOR THE C IER OF STAFF:

## SIGNED

E. V. N. SCHUYLER

Colonel, USAF
Chief, Architectural * Engineering Div Directorate of Installations, DCS/O

APOAI-AE/A
Mortaveele
nctasydx


AFOAT-AE



[^0]:    DAVID E. DANIZI,
    Coionsl, USAF
    Crlet. Promm Div, D/Transportation
    USS: , on itaff/ltateriel

