



US Army Corps
of Engineers ®

EIRS Bulletin

Engineering Improvement Recommendation System

No. 97-08

Date: 17 October 1997

The Engineering Improvement Recommendation System Bulletin (EIRS) is part of our Information Feedback System and is used in military construction programs to expedite dissemination of information regarding problems. The probable solutions included in the EIRS BULLETIN have not been thoroughly explored or staffed. Accordingly, these probable solutions do not represent a final HQUSACE position, and their use is not mandatory. Probable solutions are considered as informational in nature for the purpose of permitting prompt consideration by the field. The EIRS Bulletin recipients are encouraged to comment on the probable solutions presented so that other viewpoints can be considered in the development of the final HQUSACE position. Since changes to criteria approved by ENG Form 3078, Recommended Changes to Engineering Documents, are expected to remain firm, they are identified as final solutions and should be used in current design. To defray printing costs, local reproduction of this bulletin is authorized. This issue of the EIRS Bulletin contains 4 enclosures as follows:

ENCL 1: ENGINEERING AND DESIGN - Fire Protection Engineering Criteria

ENCL 2: ENGINEERING AND DESIGN - Range Standard Design Manuals

ENCL 3: RECOMMENDED CHANGES TO ENGINEERING DOCUMENTS - ENG Form 3078 Follow-up Actions

ENCL 4: CURRENT DESIGN CRITERIA - Recently Issued Criteria

FOR THE COMMANDER:

4 Encls

A handwritten signature in black ink, appearing to read 'Kisuk Cheung'.

KISUK CHEUNG, P.E.

Chief, Engineering and Construction Division
Directorate of Military Programs

ENGINEERING AND DESIGN

Fire Protection Engineering Criteria:

a. Problem: Engineering Technical Letter (ETL) 1110-3-484, Aircraft Hangar Fire Protection Systems, 26 September 1997, has recently been issued and is available on TECHINFO. The new ETL supersedes ETL 1110-3-411 and incorporates new Air Force (AF) requirements for hangars, new sprinkler and fire detector specifications based on recently conducted fire tests, as well as lessons-learned experiences. Air Force criteria, i.e., AF ETL 96-1 Fire Protection Engineering Criteria, - New Aircraft facilities, mandates that all design submissions be reviewed by the USACE Technical Center of Expertise (TCX) for Aircraft Hangar Fire Protection. Compliance to AF ETL 96-1 is mandatory for Air Force hangar projects. Engineering Technical Letter 1110-3-484 provides procedures for submitting design submittals to the TCX for review.

b. Probable Solution: ETL 1110-3-484 will be implemented as “special” application as defined by Paragraph 8c of ER 1110-345-100.

ENGINEERING AND DESIGN

Range Standard Design Manuals:

a. Problem: Range and Training Land Program, Mandatory Center of Expertise (MCX), CEHNC, is responsible for developing and publishing standard range design manuals and publishing training facility standards for life-cycle management. Today's resource constraint environment and the need for products and services that meet customer expectations of quality, timeliness, and cost effectiveness requires the MCX to modernize.

b. Probable Solution: To improve effectiveness, the MCX is revamping processes and leveraging technology across traditional functional processes to streamline and provide a more efficient customer service. This simultaneously is a two-step modernization process:

(1) One step is to combine and update several range manuals into a single source document to eliminate repetition and cost of distribution.

(2) The other step is to transition to digital publications for distribution in various formats, e.g., CD-ROM, paper, and INTERNET (CEHNC Homepage: <http://www.hnd.usace.army.mil/rtlp/>).

RECOMMENDED CHANGES TO ENGINEERING DOCUMENTS

ENG Form 3078 Follow-up Actions:

a. Problem: ENG Forms 3078 which indicate an affirmative action by HQUSACE are provided to the originating USACE Commands. Since the ENG Forms 3078 will result in changes to the criteria and guidance, all USACE Commands should receive the same information to be used in criteria designs.

b. Probable Solution: Reviewed ENG Forms 3078 which make a commitment to change guide specifications, manuals, etc. will be included in the EIRS Bulletin, unless the change has been accomplished. This enclosure includes a copy of ENG Form 3078.

ENG FORMS 3078

<u>CONTROL NO.</u>	<u>PUB NO.</u>	<u>OFFICE SYMBOL</u>
9063	CEGS-14240	CESAD-ET-C
9074	CEGS-15990	CEMP-CE
9075	CEGS-15650	CESWF-ED-CS
1004	CEGS-13202	CESPK-ED-M
1005	CEGS-14240	CESPK-ED-M
1007	CEGS-14630	CESPK-ED-M
1008	CEGS-15320	CESPK-ED-M
1009	CEGS-15331	CESPK-ED-M

RECOMMENDED CHANGES TO ENGINEERING DOCUMENTS

(Submit a separate form in quadruplicate for each report)

(ER 1110-345-100)

OFFICE SYMBOL AND DATE

DOCUMENT NUMBER AND DATE

CEGS 14290

DOCUMENT TITLE

ELEVATOR

CE SAD-ET-C

DOCUMENT TYPE

- DRAWING ((STANDARD) (DEFINITIVE))
- SPECIFICATION ((GUIDE) (STANDARD))
- DESIGN GUIDES
- TECHNICAL MANUAL
- ENGINEER MANUAL
- ENGINEER REGULATION
- OTHER

- MILITARY
- CIVIL WORKS

SUBJECT

DOCUMENT REVIEW COMMENTS

ROUTING (Check)

FROM: N/A
District Commander
U.S. Army Engineer District.

ACTION RECOMMENDED BY DISTRICT COMMANDER

(See Sheet 2)

OFFICE SYMBOL

NAME AND TITLE (Print or Type)

DATE

SIGNATURE

1a. TO: N/A
HOUSACE (CEMP-EA)
WASH DC 20314-1000

INFORMATION COPY OF THIS ENG FORM 3078 WAS SENT

(Date)

1b. TO: FROM:
Division Commander
U.S. Army Engineer Division.

COMMENTS ACTION OR RECOMMENDATION BY DIVISION COMMANDER

SEE SHEET 2 OF 2, NOV 1996

OFFICE SYMBOL

NAME AND TITLE (Print or Type)

CE SAD-ET-C GEORGE R. PRINCE, JR., CHIEF,
CONSTRUCTION DIV.

DATE

4 NOV 96

SIGNATURE

George R. Prince

2. TO:
HOUSACE (CEMP-EA)
WASH DC 20314-1000

COMMENTS OR ACTION BY COMMANDER, USACE

Concur, will incorporate recommendation into CGES, by notice change.

OFFICE SYMBOL

NAME AND TITLE (Print or Type)

CEMP-E

KISUK CHEUNG, P.E., C, ENGR. DIV., MP

DATE

19 Dec 96

SIGNATURE

WRK

3. TO:
Division Commander
U.S. Army Engineer Division.

COMMENTS BY DIVISION COMMANDER

OFFICE SYMBOL

NAME AND TITLE (Print or Type)

CE SAD-ET-C

DATE

SIGNATURE

4. RETURN TO:
District Commander
U.S. Army Engineer District.

COPY FURNISHED

RECOMMENDED CHANGES TO ENGINEERING DOCUMENTS (Cont'd)

OFFICE SYMBOL AND DATE

CESAD ET-C
1996

PROBLEM DESCRIPTION AND ACTION RECOMMENDED (Use additional sheets if necessary)

1. PROBLEM:

PAR 2.1.1, FREIGHT ELEVATOR

THERE ARE NO PROVISIONS FOR THE
ELEVATOR DOOR SIZE. THE TERM
"STANDARD PRODUCT" AS INDICATED IN
THE SPECS DOES NOT FULLY DEFINE
THE INTENDED SIZE REQUIREMENT

2. RECOMMENDED SOLUTION:

FREIGHT ELEVATOR DOOR SIZE SHOULD
BE SPELLED OUT IN THE SPECIFICATIONS.
IN PAR 1.4.2, ELEVATOR SCHEDULE (FREIGHT)
SHOULD ADD DOOR SIZE TO BE 5'-0" WIDE
X 7'-0" HIGH.

NAME OF SUBMITTER (Optional)

SILVERIO R CARANTO

WORK TELEPHONE NUMBER (Optional)

1404 331-5283

RECOMMENDED CHANGES TO ENGINEERING DOCUMENTS

(Submit a separate form in quadruplicate for each report)

(ER 1110-345-100)

OFFICE SYMBOL AND DATE
CEMP-CE 14 MAR 97

DOCUMENT NUMBER AND DATE
CEGS 15990 AUGUST 1997

DOCUMENT TITLE
TESTING, ADJUSTING AND BALANCING OF HVAC SYSTEMS

DOCUMENT TYPE

- | | | |
|--|--|--|
| <input type="checkbox"/> DRAWING ((STANDARD) (DEFINITIVE)) | <input checked="" type="checkbox"/> SPECIFICATION ((GUIDE) (STANDARD)) | <input checked="" type="checkbox"/> MILITARY |
| <input type="checkbox"/> DESIGN GUIDES | <input type="checkbox"/> TECHNICAL MANUAL | <input type="checkbox"/> CIVIL WORKS |
| <input type="checkbox"/> ENGINEER MANUAL | <input type="checkbox"/> ENGINEER REGULATION | <input type="checkbox"/> OTHER |

SUBJECT

THE REQUIREMENT FOR THE TAB CONTRACTOR TO BE PRESENT DURING COMMISSIONING OF HVAC SYSTEMS IF CEGS 15995 IS A REQUIREMENT IN CONTRACT SPECIFICATIONS.

ROUTING (Check)

ACTION RECOMMENDED BY DISTRICT COMMANDER

FROM:
District Commander
U.S. Army Engineer District,

(See Sheet 2)

OFFICE SYMBOL

NAME AND TITLE (Print or Type)

CEMP-CE

GARY G. BAUER, MECHANICAL ENGINEER

DATE
14 Mar 1997

SIGNATURE

Gary G. Bauer P.E.

1a. TO:
HQUSACE (CEMP-EA)
WASH DC 20314-1000

INFORMATION COPY OF THIS ENG FORM 3078 WAS SENT

(Date)

1b. TO:
Division Commander
U.S. Army Engineer Division,

COMMENTS, ACTION, OR RECOMMENDATION BY DIVISION COMMANDER

OFFICE SYMBOL

NAME AND TITLE (Print or Type)

CEMP-C

C. R. SCHROER

DATE

3/18/97

SIGNATURE

C.R. Schroer

2. TO:
HQUSACE (CEMP-EA)
WASH DC 20314-1000

COMMENTS OR ACTION BY COMMANDER, USACE

Concur. See attached sheet.

OFFICE SYMBOL

NAME AND TITLE (Print or Type)

CEMP-E

KISUK CHEUNG, C, ENGR DIV, D/MP

DATE

4/10/97

SIGNATURE

Kisuk Cheung

3. TO:
Division Commander
U.S. Army Engineer Division,

COMMENTS BY DIVISION COMMANDER

OFFICE SYMBOL

NAME AND TITLE (Print or Type)

DATE

SIGNATURE

4. RETURN TO:
District Commander
U.S. Army Engineer District,

COPY FURNISHED

RECOMMENDED CHANGES TO ENGINEERING DOCUMENTS (Cont'd)

OFFICE SYMBOL AND DATE
CEMP-CE
14 MAR 1997

PROBLEM DESCRIPTION AND ACTION RECOMMENDED *(Use additional sheets if necessary.)*

1. PROBLEM:

Presently the TAB contractor only sees CEGS 15990 TAB of HVAC Systems when he bids a contract. CEGS 15990 does not presently inform the TAB contractor that he is required to be a team member if commissioning is a contract requirement. If the TAB contractor is not aware of CEGS 15995 he does not include money in his bid for commissioning. It is more difficult to get the TAB contractor back as a team member for commissioning if he has not included commissioning in his original bid. Since commissioning takes place only after all other work is completed, including the TAB report and his approval, the TAB contractor is no longer on site.

2. RECOMMENDED SOLUTION:

Include in CEGS 15990 TAB of HVAC Systems a statement to remind the TAB contractor that if CEGS 15995 Commissioning of HVAC systems is a contract requirement the TAB contractor will take part in the commissioning process as a team member. The TAB contractor will be required to participate in the pre-commissioning checks and the functional performance testing specified.

It would also be helpful to include a similar statement in CEGS 15950 and 15951 control systems. The controls contractor is required to be a team member during the commissioning process.

NAME OF SUBMITTER *(Optional)*

WORK TELEPHONE NUMBER *(Optional)*

Concur. CEGS 15990 Testing, Adjusting and Balancing of HVAC Systems is presently being revised. A sentence similar to the following will be added as a designers option to be retained when CEGS 15995 is included in the contract.

[The TAB specialist shall participate in the HVAC commissioning process as specified in section 15990 Commissioning of HVAC Systems]

RECOMMENDED CHANGES TO ENGINEERING DOCUMENTS

(Submit a separate form in quadruplicate for each report)

(ER 1110-345-100)

OFFICE SYMBOL AND DATE
CESWF-ED-CS
CESWF-ED-TM

6 Feb 97

DOCUMENT NUMBER AND DATE
CEGS-15650 (Jul 92)
w/Not #6 (Feb 96)

DOCUMENT TITLE
Central Refrigerated Air-Conditioning System

DOCUMENT TYPE

- DRAWING ((STANDARD) [DEFINITIVE]) SPECIFICATION ((GUIDE) [STANDARD])
- DESIGN GUIDES TECHNICAL MANUAL
- ENGINEER MANUAL ENGINEER REGULATION OTHER

- MILITARY
- CIVIL WORKS

SUBJECT Chiller Performance Test, Liquid Chilling Package Capacity Criteria, and Refrigerant Leak Detector

ROUTING (Check)

ACTION RECOMMENDED BY DISTRICT COMMANDER

FROM:
District Commander
U.S. Army Engineer District,
ATTN: CESWF-ED-CS
Fort Worth, TX
76102-0300

(See Sheet 2)

OFFICE SYMBOL: CESWF-ED NAME AND TITLE (Print or Type): R. TERRY COOMES, P.E.
Acting Chief, Engineering and Construction Div.

DATE: 2/12/97 SIGNATURE: *[Signature]*

1a. TO:
HQUSACE (CEMP-EA)
WASH DC 20314-1000

INFORMATION COPY OF THIS ENG FORM 3078 WAS SENT _____ (Date)

1b. TO:
Division Commander
U.S. Army Engineer Division,
ATTN: CESWD-ED-T
Dallas, TX
75242-0216

COMMENTS, ACTION, OR RECOMMENDATION BY DIVISION COMMANDER
Concur with recommended solutions 2a and 3, recommend approval. *[Signature]*

OFFICE SYMBOL: CESWD-ETE-T NAME AND TITLE (Print or Type): PAUL D. ROBINSON, P.E.
Director, Engineering and Tech Services Directorate

DATE: 2-21-97 SIGNATURE: *[Signature]*

2. TO:
HQUSACE (CEMP-EA)
WASH DC 20314-1000

COMMENTS OR ACTION BY COMMANDER, USACE
concur
See attach sheet.

OFFICE SYMBOL: CEMP-E NAME AND TITLE (Print or Type): KISUK CHEUNG, P.E. C, ENGR. DIV, D/MP

DATE: 22 Sep SIGNATURE: *[Signature]*

3. TO:
Division Commander
U.S. Army Engineer Division,
ATTN: CESWD-ED-T
Dallas, TX
75242-0216

COMMENTS BY DIVISION COMMANDER

OFFICE SYMBOL: NAME AND TITLE (Print or Type):

DATE: SIGNATURE:

4. RETURN TO:
District Commander
U.S. Army Engineer District,
ATTN: CESWF-ED-CS
Fort Worth, TX
76102-0300

COPY FURNISHED

RECOMMENDED CHANGES TO ENGINEERING DOCUMENTS (Cont'd)

OFFICE SYMBOL AND DATE
CESWF-ED-CS
CESWF-ED-TM
6 Feb 97

PROBLEM DESCRIPTION AND ACTION RECOMMENDED (Use additional sheets if necessary.)

1. PROBLEM:

See Attached Sheets.

2. RECOMMENDED SOLUTION:

See Attached Sheets.

NAME OF SUBMITTER (Optional)

Jack Osborne, P.E.

WORK TELEPHONE NUMBER (Optional)

(817) 978-2297

SUBJECT: Chiller Performance Test, Liquid Chilling Package Capacity Criteria, and Refrigerant Leak Detector

1. PROBLEM:

Paragraph 15650-2.12.1: Chiller Performance Test

This paragraph stipulates "no tolerance" on load and an option for "no tolerance" on efficiencies for the ARI Standard 550 factory testing of centrifugal and screw chillers. I disagree with the government redefining the tolerances on a test established by an independent organization. We accept the tolerances on chillers below 300 tons, due to fact that factory tests are not recommended per the "note to designer". If possible lack of capacity was the reason for this deviation from the ARI standard tests, then it is just as important on the smaller chillers and should be considered during design.

1. RECOMMENDED SOLUTION:

Paragraph 15650-2.12.1: Chiller Performance Test

Delete the sentence "Tolerance or deviation shall not be allowed on chiller capacity [or] [EER] [IPLV] [APLV]".

2. PROBLEM:

Paragraph 15650-2.5.3.1: Capacity Criteria

- a. The title of the paragraph is Capacity Criteria, however it more importantly states efficiencies.
- b. The paragraph states that the tests shall be in accordance with ARI 590 which covers reciprocating chillers not centrifugal and screw types.
- c. If the factory test paragraph is not changed, then the statement of "no tolerance" on capacity or efficiencies should be included to insure the bidder is fully aware of the possible impact.

2. RECOMMENDED SOLUTION:

Paragraph 15650-2.5.3.1: Capacity Criteria

- a. If recommendation 1. above is accepted:
 - (1) Add the following to the "note to designer": The ARI testing of chiller allows a deviation to chiller capacity of up to 5% at full load. Load calculations should consider this tolerance.
 - (2) change "ARI 590" to "ARI 550"
 - (3) Title should read: 2.5.3.1 Capacity and Efficiency Criteria.
- b. If recommendation 1. is not accepted:
 - (1) Add the following sentence to end of this paragraph. [Factory testing shall be performed on the unit(s). Tolerance or deviation shall not be allowed on chiller capacity [or] [EER] [IPLV] [APLV]]
 - (2) Add note to designer to coordinate with paragraph "Factory Testing of Chiller".
 - (3) change "ARI 590" to "ARI 550"
 - (4) Tile should read: 2.5.3.1 Capacity and Efficiency

3. PROBLEM:

Paragraph 15650-2.7.4: Refrigerant Leak Detector

Specification 15650, paragraph 2.7.4, the refrigerant leak detector is specified to be used in mechanical rooms which house chillers utilizing refrigerant R-123 only. There is no mention about chillers using refrigerant R-22 or R-134a. For chiller utilizing refrigerant R-22 or R-134a, oxygen sensor should be provided.

3. RECOMMENDED SOLUTION:

Paragraph 15650-2.7.4: Refrigerant Leak Detector

After paragraph 2.7.4, add new paragraph 2.7.5 as follows and re-number all sub-paragraphs accordingly.

2.7.5 Oxygen Sensor

An oxygen sensor shall be provided in any mechanical room or enclosed area which houses a chiller utilizing R-22 or R-134a. The sensor shall be located where refrigerant is likely to concentrate. The sensor shall be specifically designed to measure the percent oxygen level within an area. The sensor shall have an adjustable sensitivity such that it can detect oxygen level at or below 21 percent by volume. The sensor shall energize the local mechanical ventilation system and initiate an audible and visible alarm upon detecting oxygen level below 19.5 volume percent.

Response to 3078 Submitted 6 February 1997

Problem 1. It is important for the submitted liquid cooled chiller to meet the cooling needs of the design. To assure this, paragraph 2.13.1, "Chiller Performance Test", the designer will now be given the option to require as a minimum the capacity that is shown on the mechanical schedule or the designer can accept the tolerance of ARI 550 but adjust their capacity needs of their mechanical schedule accordingly to assure that capacity requirements will be met. A change shall be issued to the guide specification to reflect this.

Problem 2.

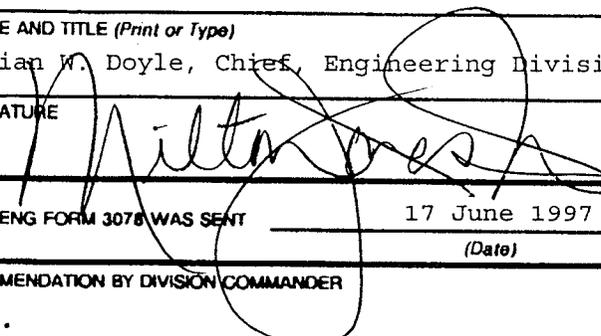
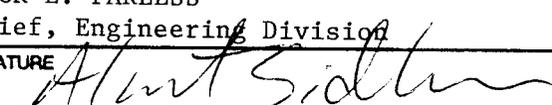
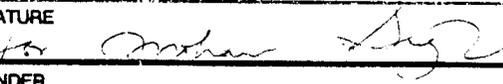
A. A revised CEGS 15650 will be forthcoming which will list efficiencies under a designer's note in the section "PRODUCTS" which is appropriate.

B. The designer's note under the section "PRODUCTS" in the revised specification does not mention ARI 590.

C. Under the designer's note at the beginning of the section "PRODUCTS" a sentence clearly states that minimum efficiencies will be stated in the specification (CEGS 15650) or on the design drawings.

Problem 3.

An EIRS bulletin is being issued this Spring to give the designer interim guidance to the handling of refrigerants. The material from this bulletin is being implemented into the revised CEGS 15650.

RECOMMENDED CHANGES TO ENGINEERING DOCUMENTS (Submit a separate form in quadruplicate for each report) (ER 1110-345-100)		OFFICE SYMBOL AND DATE
DOCUMENT NUMBER AND DATE CEGS 13202 November 1993	DOCUMENT TITLE Fuel Storage System	CESPK-ED-M 10 Jun 1997
DOCUMENT TYPE <input type="checkbox"/> DRAWING ((STANDARD) [DEFINITIVE]) <input checked="" type="checkbox"/> SPECIFICATION (([GUIDE] [STANDARD])) <input type="checkbox"/> DESIGN GUIDES <input type="checkbox"/> TECHNICAL MANUAL <input type="checkbox"/> ENGINEER MANUAL <input type="checkbox"/> ENGINEER REGULATION <input type="checkbox"/> OTHER		<input checked="" type="checkbox"/> MILITARY <input type="checkbox"/> CIVIL WORKS
SUBJECT "GA" Contractor Submittals		
ROUTING (Check)		ACTION RECOMMENDED BY DISTRICT COMMANDER
FROM: District Commander U.S. Army Engineer District, Sacramento CESPK-ED-M		(See Sheet 2)
		OFFICE SYMBOL CESPK-ED
		NAME AND TITLE (Print or Type) Brian W. Doyle, Chief, Engineering Division
		DATE 16 Jun 97
		SIGNATURE 
1a. TO: HQUSACE (CEMP-EA) WASH DC 20314-1000	INFORMATION COPY OF THIS ENG FORM 3078 WAS SENT _____ 17 June 1997 (Date)	
1b. TO: Division Commander U.S. Army Engineer Division, South Pacific CESPD-ED	COMMENTS, ACTION, OR RECOMMENDATION BY DIVISION COMMANDER RECOMMEND APPROVAL.	
		OFFICE SYMBOL CESPD-ET-E
		NAME AND TITLE (Print or Type) JACK E. FARLESS Chief, Engineering Division
		DATE 7/21/97
		SIGNATURE 
2. TO: HQUSACE (CEMP-EA) WASH DC 20314-1000	COMMENTS OR ACTION BY COMMANDER, USACE See attached sheet.	
		OFFICE SYMBOL CEMP-E
		NAME AND TITLE (Print or Type) KISUK CHEUNG, P.E. C, ENGR. DIV., D/MP
		DATE 11 Aug 97
		SIGNATURE 
3. TO: Division Commander U.S. Army Engineer Division, South Pacific ATTN: CESPD-ED 333 Market St. San Francisco CA 94105	COMMENTS BY DIVISION COMMANDER	
		OFFICE SYMBOL
		NAME AND TITLE (Print or Type)
		DATE
		SIGNATURE
4. RETURN TO: District Commander U.S. Army Engineer District, Sacramento CESPK-ED-M (ET&S)	COPY FURNISHED	

RECOMMENDED CHANGES TO ENGINEERING DOCUMENTS (Cont'd)OFFICE SYMBOL AND DATE
CESPK-ED-M
10 JUN 1997**PROBLEM DESCRIPTION AND ACTION RECOMMENDED (Use additional sheets if necessary.)****1. PROBLEM:**

Instruction from HQ is to minimize the quantity of contractor submittals that require Government approval, "GA" action. But the CEGS specifies the following as "GA" event though they do not appear to fall under the "Government Approval" submittals of CEGS-01330, Paragraph 1.1.1.

SD-01:

Catalog Data "GA"

SD-01:

Permitting "GA"

SD-01:

Registration "GA"

SD-04:

Drawings; Diagrams; Layouts; Anchorage; etc. "GA"

SD-04:

Monitoring System "GA"

SD-07:

Demonstrations "GA"

SD-08:

Experience "GA"

SD-08:

Welding "GA"

SD-08:

Radiographic Tests "GA"

SD-09: Factory Tests "GA" &
Tests "GA"**2. RECOMMENDED SOLUTION:**

Change the "GA" submittals to "FIO" (For Information Only) for the above.

NAME OF SUBMITTER (Optional)

Gene Ernst (916) 557-7776 CO-C
thru Steve Freitas; ED-M, CRITERIA MANAGEMENT UNIT

WORK TELEPHONE NUMBER (Optional)

(916, 557-7296)

CEGS-13202 Fuel Storage System
November 1993

Concur with intent to limit the need for government approval of submittals to the most critical features. We have recently completed a review of the guide specifications to confirm the need for government approval and eliminate the requirement where not considered essential. The guide specifications have or are being revised to reflect these changes. In many cases we are giving the designer the option of determining the review level depending on the project specific requirements.

RECOMMENDED CHANGES TO ENGINEERING DOCUMENTS

(Submit a separate form in quadruplicate for each report)

(ER 1110-345-100)

OFFICE SYMBOL AND DATE

CESPK-ED-M
6 June 1997

DOCUMENT NUMBER AND DATE

CEGS-14240
October 1993

DOCUMENT TITLE

Elevators, Hydraulic

DOCUMENT TYPE

- DRAWING ((STANDARD) [DEFINITIVE]) SPECIFICATION ((GUIDE) [STANDARD])
- DESIGN GUIDES TECHNICAL MANUAL
- ENGINEER MANUAL ENGINEER REGULATION OTHER

- MILITARY
 CIVIL WORKS

SUBJECT

"GA" Contractor Submittals

ROUTING (Check)

FROM:

District Commander
U.S. Army Engineer District,

Sacramento
CESPK-ED-M

ACTION RECOMMENDED BY DISTRICT COMMANDER

(See Sheet 2)

OFFICE SYMBOL

CESPK-ED

NAME AND TITLE (Print or Type)

Brian W. Doyle, Chief, Engineering Division

DATE

16 Jun 97

SIGNATURE

Milton [Signature]

1a. TO:

HOUSACE (CEMP-EA)
WASH DC 20314-1000

INFORMATION COPY OF THIS ENG FORM 3078 WAS SENT

12 June 1997

(Date)

1b. TO:

Division Commander
U.S. Army Engineer Division,

South Pacific
CESPD-ET

COMMENTS, ACTION, OR RECOMMENDATION BY DIVISION COMMANDER

RECOMMEND APPROVAL.

OFFICE SYMBOL

CESPD-ET-E

NAME AND TITLE (Print or Type)

JACK E. FARLESS
Chief, Engineering Division

DATE

7/21/97

SIGNATURE

Alvin [Signature]

2

TO:
HOUSACE (CEMP-EA)
WASH DC 20314-1000

COMMENTS OR ACTION BY COMMANDER, USACE

Concur
See attached sheet.

OFFICE SYMBOL

CEMP-E

NAME AND TITLE (Print or Type)

KISUK CHEUNG, P.E. C., ENGR DIV., D/MP

DATE

8/28/97

SIGNATURE

3.

TO:
Division Commander
U.S. Army Engineer Division,

South Pacific
ATTN: CESPD-ET
333 Market St.
San Francisco CA
94105

COMMENTS BY DIVISION COMMANDER

OFFICE SYMBOL

NAME AND TITLE (Print or Type)

DATE

SIGNATURE

4.

RETURN TO:
District Commander
U.S. Army Engineer District,

Sacramento
CESPK-ED-M (ET&S)

COPY FURNISHED

RECOMMENDED CHANGES TO ENGINEERING DOCUMENTS (Cont'd)OFFICE SYMBOL AND DATE
CESPK-ED-M
5 June 1997

PROBLEM DESCRIPTION AND ACTION RECOMMENDED (Use additional sheets if necessary.)

1. PROBLEM:

Instruction from HQ is to minimize the quantity of contractor submittals that require Government approval, "GA" action. But the CEGS specifies the following as "GA" even though they are not so called extensions of design.

SD-19: O&M Manuals "GA"

2. RECOMMENDED SOLUTION:

Change the "GA" submittals to "FIO" (For Information Only) for the above.

NAME OF SUBMITTER (Optional)

Gene Ernst (916) 557-7776 CO-C
thru Steve Freitas; ED-M, CRITERIA MANAGEMENT UNIT

WORK TELEPHONE NUMBER (Optional)

(916) 557-7296

CEMP-ET

18 August 1997

SUBJECT: 3078 Submitted by CESP-K-ED-M, 5 June 1997, CEGS 14240, Hydraulic Elevators,

1. Concur with the intent to limit government approval of submittals to the most critical features. We have recently completed a review of the guide specifications to confirm the need for government approval and eliminate the requirement where not considered essential. The guide specifications have or are being revised to reflect these changes. In many cases we are giving the designer the option of determining the review level depending on the project specific requirements.

2. This following action is applicable to the submittal item addressed in the subject 3078:

a. SD-19 O&M Manuals: This item will remain "GA" since inspection, maintenance and service on elevators are highly specialized and can be costly. It is important that O&M Manuals for elevators are complete and meet specifications requirements before being turned over to the user.

RECOMMENDED CHANGES TO ENGINEERING DOCUMENTS

(Submit a separate form in quadruplicate for each report)

(ER 1110-345-100)

OFFICE SYMBOL AND DATE

CESPK-ED-M
5 June 1997

DOCUMENT NUMBER AND DATE

CEGS-14630
May 1993

DOCUMENT TITLE

Overhead Electric Cranes

DOCUMENT TYPE

DRAWING ((STANDARD) [DEFINITIVE])

SPECIFICATION ((GUIDE) [STANDARD])

DESIGN GUIDES

TECHNICAL MANUAL

ENGINEER MANUAL

ENGINEER REGULATION

OTHER

MILITARY
XX

CIVIL WORKS

SUBJECT

"GA" Contractor Submittals

ROUTING (Check)

FROM:

District Commander
U.S. Army Engineer District,

Sacramento
CESPK-ED-M

ACTION RECOMMENDED BY DISTRICT COMMANDER

(See Sheet 2)

OFFICE SYMBOL

CESPK-ED

NAME AND TITLE (Print or Type)

Brian W. Doyle, Chief, Engineering Division

DATE

SIGNATURE

1a. TO:

HQUSACE (CEMP-EA)
WASH DC 20314-1000

INFORMATION COPY OF THIS ENG FORM 3078 WAS SENT

12 June 1997

(Date)

1b. TO:

Division Commander
U.S. Army Engineer Division,

South Pacific
CESPD-ET

COMMENTS, ACTION, OR RECOMMENDATION BY DIVISION COMMANDER

RECOMMEND APPROVAL.

OFFICE SYMBOL

CESPD-ET-E

NAME AND TITLE (Print or Type)

JACK E. FARLESS
Chief, Engineering Division

DATE

7/21/97

SIGNATURE

[Signature]

2

TO:
HQUSACE (CEMP-EA)
WASH DC 20314-1000

COMMENTS OR ACTION BY COMMANDER, USACE

Concur. CGES 14630 will incorporate recommended change by notice.

OFFICE SYMBOL

CEMP- E

NAME AND TITLE (Print or Type)

KISUK CHEUNG, P.E. C. ENGR. DIV. D/MP

DATE

8/28/97

SIGNATURE

[Signature]

3.

Division Commander
U.S. Army Engineer Division,

South Pacific
ATTN: CESPD-ET
333 Market St.
San Francisco CA
94105

COMMENTS BY DIVISION COMMANDER

OFFICE SYMBOL

NAME AND TITLE (Print or Type)

DATE

SIGNATURE

4. RETURN TO:

District Commander
U.S. Army Engineer District,

Sacramento
CESPK-ED-M (ET&S)

COPY FURNISHED

RECOMMENDED CHANGES TO ENGINEERING DOCUMENTS (Cont'd)

OFFICE SYMBOL AND DATE
CESPK-ED-M
5 June 1997

PROBLEM DESCRIPTION AND ACTION RECOMMENDED (Use additional sheets if necessary.)

1. PROBLEM:

Instruction from HQ is to minimize the quantity of contractor submittals that require Government approval, "GA" action. But the CEGS specifies the following as "GA" even though they do not appear to fall under the "Government Approved" submittals of CEGS-01330, Paragraph 1.1.1.

SD-06: Framed Instructions "GA"

2. RECOMMENDED SOLUTION:

Change the "GA" submittals to "FIO" (For Information Only) for the above.

NAME OF SUBMITTER (Optional)

Gene Ernst (916) 557-7776 CO-C
thru Steve Freitas; ED-M, CRITERIA MANAGEMENT UNIT

WORK TELEPHONE NUMBER (Optional)

(916 557-7296)

RECOMMENDED CHANGES TO ENGINEERING DOCUMENTS

(Submit a separate form in quadruplicate for each report)

(ER 1110-345-100)

OFFICE SYMBOL AND DATE

CESPK-ED-M
04 June 1997

DOCUMENT NUMBER AND DATE

CEGS-15320
May 1992

DOCUMENT TITLE

Fire Pumps

DOCUMENT TYPE

- DRAWING ((STANDARD) [DEFINITIVE]) SPECIFICATION ((GUIDE) [STANDARD])
- DESIGN GUIDES TECHNICAL MANUAL
- ENGINEER MANUAL ENGINEER REGULATION OTHER

MILITARY

CIVIL WORKS

SUBJECT

"GA" Contractor Submittals

ROUTING (Check)

FROM:
District Commander
U.S. Army Engineer District,

Sacramento
CESPK-ED-M

ACTION RECOMMENDED BY DISTRICT COMMANDER

(See Sheet 2)

OFFICE SYMBOL

CESPK-ED

NAME AND TITLE (Print or Type)

Brian W. Doyle, Chief, Engineering Division

DATE

6/16/97

SIGNATURE

Milton [Signature]

1a. TO:

HQUSACE (CEMP-EA)
WASH DC 20314-1000

INFORMATION COPY OF THIS ENG FORM 3078 WAS SENT

11 June 1997

(Date)

1b. TO:

Division Commander
U.S. Army Engineer Division,

South Pacific
CESPD-ET

COMMENTS, ACTION, OR RECOMMENDATION BY DIVISION COMMANDER

RECOMMEND APPROVAL.

OFFICE SYMBOL

CESPD-ET-E

NAME AND TITLE (Print or Type)

JACK E. FARLESS
Chief, Engineering Division

DATE

7/21/97

SIGNATURE

Albert [Signature]

2

TO:
HQUSACE (CEMP-EA)
WASH DC 20314-1000

COMMENTS OR ACTION BY COMMANDER, USACE

Concur
See attached sheet.

OFFICE SYMBOL

CEMP-E

NAME AND TITLE (Print or Type)

KISUK CHEUNG, P.E. C, ENGR. DIV., D/MP

DATE

SIGNATURE

[Signature]

3

TO:
Division Commander
U.S. Army Engineer Division,

South Pacific
ATTN: CESPD-ET
333 Market St.
San Francisco, CA
94105

COMMENTS BY DIVISION COMMANDER

OFFICE SYMBOL

NAME AND TITLE (Print or Type)

DATE

SIGNATURE

4

RETURN TO:
District Commander
U.S. Army Engineer District,

Sacramento
CESPK-ED-M (ET&S)

COPY FURNISHED

RECOMMENDED CHANGES TO ENGINEERING DOCUMENTS (Cont'd)

OFFICE SYMBOL AND DATE
CESPK-ED-M
04 June 1997

PROBLEM DISCRPTION AND ACTION RECOMMENDED (Use additional sheets if necessary.)

1. PROBLEM:

Instruction from HQ is to minimize the quantity of contractor submittals that require Government approval, "GA" action. But the CEGS specifies the following as "GA" even though they do not appear to fall under the "Government Approved" submittals of CEGS-01330, Paragraph 1.1.1.

SD-04: Drawings "GA"
 SD-04: As-Built Drawings "GA"
 SD-06: Instructions "GA"
 SD-09: Reports "GA"
 SD-13: Engineer's Qualifications "GA"
 SD-13: Preliminary Test "GA"
 SD-18: Test Procedures "GA"

2. RECOMMENDED SOLUTION:

Change the "GA" submittals to "FIO" (For Information Only) for the above.

NAME OF SUBMITTER (Optional)

Gene Ernst (916) 557-7776 CO-C
 thru Steve Freitas; ED-M, CRITERIA MANAGEMENT UNIT

WORK TELEPHONE NUMBER (Optional)

(916, 557-7296)

CEMP-ET

18 August 1997

SUBJECT: 3078 Submitted by CESP-K-ED-M, 4 June 1997, CEGS 15320, Fire Pumps

1. Concur with the intent to limit government approval of submittals to the most critical features. We have recently completed a review of the guide specifications to confirm the need for government approval and eliminate the requirement where not considered essential. The guide specifications have or are being revised to reflect these changes. In many cases we are giving the designer the option of determining the review level depending on the project specific requirements.

2. This following action is applicable to the submittal items addressed in the subject 3078:

a. SD-04 Drawings: This item will remain "GA". Fire pumps are reviewed in conjunction with submittals of water-based fire protection systems, such as fire sprinkler systems. Government approval of the sprinkler systems must be coordinated with the fire pump submittals. In addition, fire pump systems are not detailed on contract drawings. Fire pump submittals should be reviewed and approval by the fire protection engineering designer to ensure a quality installation. Fire pumps are considered critical for life safety and for protection of the mission and facility.

b. SD-04 As-Built Drawings: Concur. This item should be changed to "FIO" (For Information Only).

c. SD-06 Instructions: Concur. Posted instructions should be changed to "FIO".

d. SD-09 Reports: This item pertains to test reports and will remain "GA" in order to ensure that adequate tests were conducted by the contractor. The test report will provide results that prove the pump performs up to specifications. Testing of the fire pumps is considered a critical function.

e. SD-13 Engineer's Qualifications: Concur. This item should be changed to "FIO".

f. SD-13 Preliminary Test: This item will remain "GA". The provisions of this paragraph provides the government with test results of the preliminary fire pump test, complete test procedures, and formal request for performing the final inspection and test. Testing of the fire pump is a critical function, and to avoid past problems in pump acceptance testing and test preparation, we feel that the item should remain as government approved.

g. SD-18 Test Procedures: This item will remain "GA" in order to ensure that complete test procedures that adequately test the fire pumps are conducted by the contractor. Testing of the fire pumps is considered a critical function

RECOMMENDED CHANGES TO ENGINEERING DOCUMENTS

(Submit a separate form in quadruplicate for each report)

(ER 1110-345-100)

OFFICE SYMBOL AND DATE

CESPK-ED-M
5 June 1997

DOCUMENT NUMBER AND DATE

CEGS-15331
June 1994

DOCUMENT TITLE

Dry Pipe Sprinkler System, Fire Protection

DOCUMENT TYPE

- DRAWING ([STANDARD] [DEFINITIVE]) SPECIFICATION ([GUIDE] [STANDARD])
- DESIGN GUIDES TECHNICAL MANUAL
- ENGINEER MANUAL ENGINEER REGULATION OTHER

MILITARY

CIVIL WORKS

SUBJECT

"GA" Contractor Submittals

ROUTING (Check)

FROM:

District Commander
U.S. Army Engineer District,

Sacramento
CESPK-ED-M

ACTION RECOMMENDED BY DISTRICT COMMANDER

(See Sheet 2)

OFFICE SYMBOL

CESPK-ED

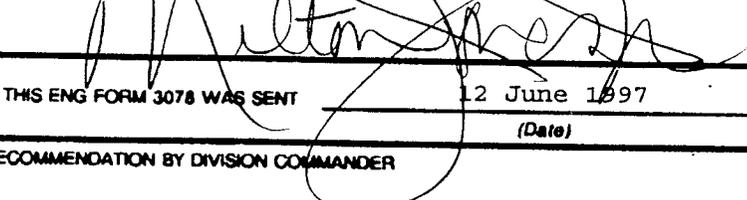
NAME AND TITLE (Print or Type)

Brian W. Doyle, Chief, Engineering Division

DATE

16 JUN 97

SIGNATURE



1a. TO:

HOUSACE (CEMP-EA)
WASH DC 20314-1000

INFORMATION COPY OF THIS ENG FORM 3078 WAS SENT

12 June 1997

(Date)

1b. TO:

Division Commander
U.S. Army Engineer Division,

South Pacific
CESPD-ET

COMMENTS, ACTION, OR RECOMMENDATION BY DIVISION COMMANDER

RECOMMEND APPROVAL.

OFFICE SYMBOL

CESPD-ET-E

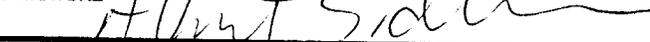
NAME AND TITLE (Print or Type)

JACK E. FARLESS
Chief, Engineering Division

DATE

7/21/97

SIGNATURE



2.

TO:
HOUSACE (CEMP-EA)
WASH DC 20314-1000

COMMENTS OR ACTION BY COMMANDER, USACE

See attached sheet.

OFFICE SYMBOL

CEMP-E

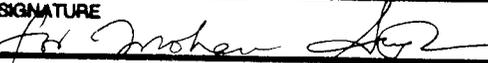
NAME AND TITLE (Print or Type)

KISUK CHEUNG, P.E. C, ENGR. DIV., D/M

DATE

8/28

SIGNATURE



3.

TO:
Division Commander
U.S. Army Engineer Division,
South Pacific
ATTN: CESPD-ET
333 Market St.
San Francisco CA
94105

COMMENTS BY DIVISION COMMANDER

OFFICE SYMBOL

NAME AND TITLE (Print or Type)

DATE

SIGNATURE

4.

RETURN TO:
District Commander
U.S. Army Engineer District,
Sacramento
CESPK-ED-M (E1&S)

COPY FURNISHED

RECOMMENDED CHANGES TO ENGINEERING DOCUMENTS (Cont'd)

OFFICE SYMBOL AND DATE
CESPK-ED-M
5 June 1997

PROBLEM DESCRIPTION AND ACTION RECOMMENDED (Use additional sheets if necessary.)

1. PROBLEM:

Instruction from HQ is to minimize the quantity of contractor submittals that require Government approval, "GA" action. But the CEGS specifies the following as "GA" even though they do not appear to fall under the "Government Approved" submittals of CEGS-01330, Paragraph 1.1.1

SD-06: Test Procedures "GA"

SD-07: Preliminary Tests "GA"

SD-07: Final Test "GA"

SD-13: Contractor's Material & Test Certificate "GA"

2. RECOMMENDED SOLUTION:

Change the "GA" submittals to "FIO" (For Information Only) for the above.

NAME OF SUBMITTER (Optional)

Gene Ernst (916) 557-7776 CO-C
thru Steve Freitas; ED-M, CRITERIA MANAGEMENT UNIT

WORK TELEPHONE NUMBER (Optional)

(916) 557-7296

CEMP-ET

18 August 1997

SUBJECT: 3078 Submitted by CESPCK-ED-M, 5 June 1997, CEGS 15331, Dry Pipe Sprinkler System, Fire Protection

1. Concur with the intent to limit government approval of submittals to the most critical features. We have recently completed a review of the guide specifications to confirm the need for government approval and eliminate the requirement where not considered essential. The guide specifications have or are being revised to reflect these changes. In many cases we are giving the designer the option of determining the review level depending on the project specific requirements.
2. This following action is applicable to the submittal items addressed in the subject 3078:
 - a. SD-06 Test Procedures: This item will remain "GA" in order to ensure that complete test procedures that adequately test the dry pipe sprinkler systems are conducted by the contractor. Testing of the fire sprinkler systems is considered a critical function.
 - b. SD-06 Preliminary Tests: This item will remain "GA". This specification paragraph addresses scheduling of the preliminary tests. The required notification for testing should remain government approved to ensure that government personnel who need to witness the testing, such as the fire department, are properly notified. Testing of the fire sprinkler systems is considered a critical function.
 - c. SD-06 Final Acceptance Test Plan: This item will remain "GA". This specification paragraph addresses scheduling of the final tests. The required notification for testing should remain government approved to ensure that government personnel who need to witness the testing, such as the fire department, are properly notified. Testing of the fire sprinkler systems is considered a critical function.
 - d. SD-13 Contractor's Material and Test Certificates: This item will remain "GA" in order to ensure that required certificates on the fire sprinkler are complete and are furnished to the government.

CURRENT DESIGN CRITERIA

Recently Issued Criteria:

a. Problem: There have been instances where current design criteria were not used in project designs because recently issued Engineering and Design documents were placed in a central office file and were not distributed to design personnel who need to be aware of the current criteria and guidance.

b. Probable Solution: From all reports, EIRS Bulletins are widely circulated within the Engineering Division of USACE Commands and are readily accessible to all engineering and design personnel. This enclosure includes a listing of recently issued criteria.

Engineering and Design criteria for Civil Works and Military Programs are distributed by the "Construction Criteria Base (CCB)" System, National Institute of Building Sciences NIBS. CCB is available in CD-ROM format and is on the CCB web site at "<http://www.nibs.org/ccb>". Information about subscribing to CCB may be obtained by calling NIBS at (202) 289-7800. Current Military Programs Engineering and Design criteria are also available on our TECHINFO web site at "<http://www.hnd.usace.army.mil/techinfo/index.htm>". For further information on TECHINFO, call the Huntsville Engineering and Support Center, CEHNC-ED-ES-G, at (205) 895-1821 between 8:00 a.m. and 4:00 p.m., Central Time.

PUBLICATION LIST

<u>PUB-NO.</u>	<u>PUBLICATION</u>	<u>PUB-DATE</u>
CEGS-01330	Submittal Procedures	Sep 97
CEGS-07550	Protected Membrane Roofing (PMR)	Aug 97
CEGS-08360	Sectional Overhead Doors	Aug 97
CEGS-08370	Vertical Lift Doors	Aug 97
CEGS-08590	Wood Windows - Repair and Rehabilitation	Aug 97
ETL 1110-1-180	Humidity and Corrosion Control for for Natatoriums	Aug 97
ETL 1110-3-484	Aircraft Hangar Fire Protection Systems	Sep 97