#### CFS TRAINING (MITAGS) <u>CRANE (EXPERIENCED OR INEXPERIENCED), RTG, GENSET</u> REGISTRATION FORM

THE FOLLOWING NAMES ARE SUBMITTED AS CANDIDATES FOR TRAINING AT THE CARRIER-ILA CONTAINER FREIGHT STATION TRUST FUND CRANE TRAINING SCHOOL IN LINTHICUM HEIGHTS, MARYLAND. IT IS UNDERSTOOD THAT THE COMPANY HEREUNDER NAMED WILL BE RESPONSIBLE FOR THE WAGES AND FRINGES OF THESE CANDIDATES AND THAT THE COMPANY WILL BE THE EMPLOYER. WAGES (ONLY) TO A MAXIMUM OF 80 HOURS STRAIGHT TIME WILL BE REIMBURSED BY THE CFS FUND UPON SUCCESSFUL COMPLETION OF THE COURSE.

TYPE OF TRAINING CLASS	CLASS DATES	ATES PORT EMPLOYER			
LEGAL FIRST NAME (NO NICKNAMES)	Full Middle Name		LAST NAME	SUFFIX (JR., SR., III)	PLANE TICKETS?
STREET ADDRESS	CITY/STATE/ZIP		Home Airport (if flying)	HOME AIRPORT (IF FLYING) DATE OF BIRTH	
Home Phone	Cell Phone		E-Mail		
LEGAL FIRST NAME (NO NICKNAMES)	Full Middle Nam	10	Last Name	SUFFIX (JR., SR., III)	PLANE TICKETS?
LEGALT INSTITUAME (NO NICRNAMES)					T LANE TICKETS:
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STREET ADDRESS	City/State/ZIP		HOME AIRPORT (IF FLYING)	DATE OF BIRTH	
Home Phone	Cell Phone		E-Mail		
LEGAL FIRST NAME (NO NICKNAMES)	Full Middle Nam	15	Last Name	SUFFIX (JR., SR., III)	PLANE TICKETS?
					T LANE TICKETS:
STREET ADDRESS	CITY/STATE/ZIP		HOME AIRPORT (IF FLYING)	HOME AIRPORT (IF FLYING) DATE OF BIRTH	
Home Phone	Cell Phone		E-MAIL mx.com OR BY FAX: 732-750-0587		

PRINTED NAME OF CONTACT PERSON

PHONE

COMPANY/ASSOCIATION

DATE

SIGNATURE OF CONTACT PERSON

# USMX-ILA Crane Training Classes at MITAGS (Experienced vs. Inexperienced)

Our job is to produce knowledgeable container crane operators and knowledgeable container crane operator trainees.

As regards instruction content, information imparted, there is no difference between the Two Week Inexperienced Trainee Course and the One Week Experienced Crane Operator Course.

# The reason there are two courses of instruction:

# Experienced Container Crane Operator

Hopefully, the experienced container crane operator who will attend our one week course has operated cranes over ships for a sufficient length of time so as to become pretty much aware of the container crane operator's task and is aware of the jobs and longshoring procedures ongoing beneath the crane as seen from the crane operator's vantage point, which can now be as high as 140 feet above the dock.

This individual has 'been there and done it.' Because of that, I decided 18 years ago, that one week would be sufficient to train experienced crane operators. We have never had an experienced crane operator fail to successfully complete the one week course.

This week we are training experienced container crane operators. One of them is from Wilmington Delaware. He has been operating cranes as a longshoreman for 28 years. He is totally enthused with the information that we are giving him.

The written final test for the experienced crane operator is the same as that for the inexperienced crane operator trainee. So, the experienced crane operator has to learn faster. The one week course is quite a bit tougher.

# The Inexperienced Crane Operator Trainee Course

There will be a mixture of people in a two week course, people from different ports, some who have never operated a piece of machinery in the longshoring industry, others who have been on a container crane as a visitor, and others who have received OJT in the home port first.

# USMX-ILA Crane Training Classes at MITAGS (Experienced vs. Inexperienced)

I think that the first step in training an inexperienced container crane operator trainee should be attendance at our two week inexperienced crane operator trainee course. When the individual returns home to begin OJT on a real crane, he will have a whole lot of container crane knowledge that he will not be able to get in any other way.

Also, the crane simulator practice will acclimate the trainee to the view of the work area that the crane operator sees. We have found that trainees who have spent several days working with the simulator before going on a real crane seem to have operated before when they first sit in the operator's seat.

In this way, your instructor will not begin training a person who is totally unknowlegeable about container cranes.

If you begin the training of someone on a real crane, it really takes a while for that trainee to become accustomed to working with the crane as viewed from the operator's station.

# On-The-Job Training at the Home Port

Basically, On-The-Job Training at your port is likely to be as it is in everybody else's port. That is, the trainee stands behind the crane operator and watches what the operator does.

That is a *monkey see, monkey do* kind of training. What one operator may say to a trainee will not be what the next operator will say. And so the trainee learns to push and pull the handles, switches and buttons and make the crane move.

But he won't know anything about the crane components, he will not have discussed the various kinds of accidents that can happen with container cranes, will not know anything about the ship components that he will be looking at every day of his operating career, will not really know why he should not jerk the load, about weights that he will be lifting...on and on. He will not have even a basic understanding about this multi-million dollar machine that he is being entrusted to operate safely. It would be advantageous to you in your program to show all of your trainees the DVDs on safe container crane operation that are available at USMX. We do not use them here at the Longshore Crane Academy.

# USMX-ILA Crane Training Classes at MITAGS (Experienced vs. Inexperienced)

We don't use films or DVDs. It is as close to one-on-one training as we can get it, talking about meaningful container crane topics.

I have extensive experience with operating and maintaining container cranes, 35 years of prior employment on the waterfront in Baltimore Terminals. I also have 20 years at Maritime Institute of Technology & Graduate Studies (MITAGS).

Sincerely,

Herbert Newman

# **USMX-ILA Training**

# **Rubber Tire Gantry (RTG) Crane Class at MITAGS**

# Purpose:

The purpose of this four-day course is to enhance attendee skills in the safe operation of the RTG crane, by combining classroom training and discussion with practical application of knowledge on a state of the art RTG crane simulator. Maximum number of trainees for this course is six.

# **Objectives**:

- Pretest to establish trainee's general knowledge of industry terminology and container moving equipment
- History & purpose of RTG
- Components of RTG
- Movements of RTG
- Personal safety
- Accident avoidance
- Communication
- Limit switches, capacity, shock load avoidance
- Container, row, lane identification
- Servicing rail heads
- Crane simulation exercises with stacked containers & chassis load/discharge
- Final test given on last day of course. A minimum overall grade average of 70% must be achieved to receive a certificate of completion.

Sincerely,

Herbert Newman Instructor



# Maritime Institute of Technology & Graduate Studies (MITAGS)

# DIESEL- ELECTRICAL GENERATOR COURSE

# Course Framework

### Scope:

A ten-day, entry-level course designed to provide instruction in the operation and performance characteristics of typical diesel-driven generator sets used to supply power to refrigeration container units. Students will learn to diagnose and troubleshoot diesel-generator sets and will be able to recognize common malfunctions in both the diesel end and in the generator end. The course will provide the student with the basic understanding of the concepts and fundamentals of diesel internal combustion engines and electrical generators.

#### **Objectives:**

- Through classroom instruction and practical (hands-on) training the student will be able to use tools and meters required to effectively repair the diesel generator set.
- Upon completion of the course, the student will understand fuel injection and how the combustion cycle is regulated.
- Upon completion of the course the student will have a basic understanding of wiring diagrams, schematics, electricity, electrical circuits, transformers, and alternating current leading up to generators.
- The student will be aware and take safety precautions involving electrical shock, electrical burns, fire and explosion, heat buildup, and mechanical hazards.

#### Entry Standards:

Open to personnel with a mechanical aptitude, ability, or background who wish to acquire knowledge and understanding of the operation, servicing, and repair of typical Diesel-Driven Generator Sets used to supply power to refrigeration container units.

Because of the technical nature of subject matter, a high school education as a minimum, although not a prerequisite, is highly recommended.

Personnel or Student/Trainees with mechanical diesel-generator experience will have the opportunity to enhance and consolidate their knowledge of job-related activities.

### Certificate and/or Documentation:

Upon successful completion of this course, a certificate will be issued certifying that the Holder has successfully completed the course. An overall grade level average of 70% must be attained by the Student/Trainee to successfully complete this course.

Students unable to attain 70% will only receive a letter of attendance.

### Class Limitations:

Maximum Class Size:	8
Student-Teacher Ratio:	8 to 1

## Specific Staff Requirements:

The instructor in charge should have a Bachelor of Science Degree in Marine and/o Mechanical Engineering or equivalent practical knowledge and experience. Industry or field experience in the operation and maintenance of typical of specific types of diesel-driven generator sets used to supply power to refrigeration container units is helpful.

### **Teaching Facilities and Equipment:**

A classroom of adequate size to accommodate an instructor's desk and desks or tables with chairs to accommodate twelve (12) student/trainees is required. There should also be adequate space for several workbenches in order to utilize test equipment and for the display/demonstration of training aids and mockups.

For practical laboratory training industry equipment consisting of Marine Diesel Power Generator Sets is required. Likewise, various miscellaneous tools are required in order to service and maintain the above equipment.

## Course Equipment

- Thermo-King Diesel Gen-Set
- Electrical test instruments
- Electrical devices; relays, fuses, contactors, circuit breakers, transfomers

### Teaching Aids

- T1 Carrier Gen-Set operations manual
- T2 Thermo-King Gen-Set operations manual
- T3 Basic electricity study guide
- A1 Chalk board
- A2 Overhead projector

(Special note – Throughout the course safe working practices are to be clearly identified and emphasized, especially during the practical training sessions, involving the use of tools, test instruments, and high-voltage equipment. The instructor is responsible for supervising all activities during these sessions, insuring that all work is accomplished in a safe manner to avoid injury to personnel and damage to equipment.)

#### CFS TRAINING (MITAGS) <u>CONTAINER REFRIGERATION</u> REGISTRATION FORM

THE FOLLOWING NAMES ARE SUBMITTED AS CANDIDATES FOR TRAINING AT THE CARRIER-ILA CONTAINER FREIGHT STATION TRUST FUND CRANE TRAINING SCHOOL IN LINTHICUM HEIGHTS, MARYLAND. IT IS UNDERSTOOD THAT THE COMPANY HEREUNDER NAMED WILL BE RESPONSIBLE FOR THE WAGES AND FRINGES OF THESE CANDIDATES AND THAT THE COMPANY WILL BE THE EMPLOYER. WAGES (ONLY) TO A MAXIMUM OF 80 HOURS STRAIGHT TIME WILL BE REIMBURSED BY THE CFS FUND UPON SUCCESSFUL COMPLETION OF THE COURSE.

Type of Training Class Container Refrigeration	CLASS DATES	PORT EMPLOYER				
LEGAL FIRST NAME (NO NICKNAMES)	Full Middle Name		Last Name	SUFFIX (JR., SR., III)	PLANE TICKETS?	
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STREET ADDRESS	CITY/STATE/ZIP		Home Airport (if flying)	DATE OF	DATE OF BIRTH	
Номе Рноле	Cell Phone		E-Mail			
LEGAL FIRST NAME (NO NICKNAMES)	Full Middle Name		Last Name	SUFFIX (JR., SR., III)	PLANE TICKETS?	
STREET ADDRESS	CITY/STATE/ZIP		Home Airport (if flying)	DATE OF	Birth	
Номе Рноле	Cell Phone		E-MAIL			
LEGAL FIRST NAME (NO NICKNAMES)	Full Middle Nam	1E	Last Name	SUFFIX (JR., SR., III)	PLANE TICKETS?	
STREET ADDRESS	CITY/STATE/ZIP		Home Airport (if flying)	DATE OF	Date of Birth	
Номе Рноле	Cell Phone		E-Mail			
		AII · knorozau	ISMX.com OR BY FAX: 732-750-0587	PHONE: 732 101	2066	

PRINTED NAME OF CONTACT PERSON

PHONE

COMPANY/ASSOCIATION

DATE

SIGNATURE OF CONTACT PERSON



# Maritime Institute of Technology & Graduate Studies (MITAGS)

# **CONTAINER REFRIGERATION COURSE**

# Course Framework

### Scope:

This is a two-week course, which includes a mix of classroom lectures related to the theory of mechanical refrigeration systems and practical training related to operation, servicing, and trouble-shooting typical Marine Container Refrigeration Units. The first week is devoted to theory and the second week is devoted to practical training on Reefer Container Units including procedures involving operation, servicing, diagnostics, and troubles Specifically the course covers the following topics:

Safety Procedures, Heat Transfer Fundamentals, Mechanical Refrigeration Cycle, System Operations & Diagnosis, Electrical/electronic Systems, Power Generator Sets, Practical diagnostics & trouble-shooting.

### **Objectives:**

Through classroom instruction and practical (hands-on) training provide the attendee with the training, knowledge, basic skills, and ability to effectively operate, service, and maintain typical Marine Container Refrigeration Units.

The students will also be given the opportunity to receive a universal refrigerant recovery Certificate from the EPA.

### Entry Standards:

Open to personnel with a mechanical aptitude, ability, or background who wish to acquire knowledge and understanding of the operation, servicing, and repair of typical Marine Container Refrigeration Units.

Because of the technical nature of subject matter, a high school education as a minimum, although not a prerequisite, is highly recommended.

#### Certificate and/or Documentation:

Upon satisfactory completion of the course a certificate will be awarded certifying that the holder has successfully completed the course meeting the knowledge and skills standards. A minimum overall grade average of 70% must be achieved to receive a certificate. The student must also pass a hands-on examination of the equipment Students unable to attain 70% will only receive a letter of attendance.

### Class Limitations:

Maximum Class Size:	8
Student-Teacher Ratio:	8 to 1

## Specific Staff Requirements:

The instructor in charge should have a Bachelor of Science Degree in Marine and/or Mechanical Engineering or equivalent practical knowledge and experience. Industry or field experience in the operation and maintenance of typical of specific types of Container Refrigeration Units used in the commercial maritime industry.

### **Teaching Facilities and Equipment:**

A classroom of adequate size to accommodate an instructor's desk and desks or tables with chairs to accommodate twelve (12) student/trainees is required. There should also be adequate space for several workbenches in order to utilize test equipment and for the display/demonstration of training aids and mockups.

### **Course Equipment:**

- Carrier container refrigeration unit
- Thermo-King refrigeration unit
- Thermo-King Diesel Gen-Set
- Total claim refrigerant recovery unit
- Electrical test instruments
- Refrigeration test equipment

### **Teaching Aids**

- T1 Carrier transport refrigeration study guide
- T2 Thermo-King study guide
- T3 Carrier & Thermo-King operating manuals
- A1 Chalk board
- A2 Overhead projector

(Special note – Throughout the course safe working practices are to be clearly identified and emphasized, especially during the practical training sessions, involving the use of tools, test instruments, and high-voltage equipment. The instructor is responsible for supervising all activities during these sessions, insuring that all work is accomplished in a safe manner to avoid injury to personnel and damage to equipment.)





# **GUIDELINES**

# **REVISED JANUARY 1, 2009**

# **REIMBURSABLE TRAINING ITEMS**

PAYROLL TAXES & INSURANCE STRAIGHT TIME WAGES FOR TRAINEES\* STRAIGHT TIME WAGES FOR TRAINERS\* STRAIGHT TIME WAGES FOR CLASSROOM INSTRUCTORS\* *\*LIMITED TO 8 HOURS PER 24-HOUR PERIOD* REASONABLE FEES FOR CONSULTANTS TRAVEL EXPENSES TO AND FROM MITAGS BOARDING AND MEALS @ MITAGS TRAVEL EXPENSES FOR SPECIAL TRAINING (AUTHORIZATION REQUIRED)

# **NON-REIMBURSABLE TRAINING ITEMS**

ANY FRINGE BENEFIT CONTRIBUTIONS OVERTIME/MEAL HOURS FOR TRAINEES OVERTIME/MEAL HOURS FOR TRAINERS OVERTIME/MEAL HOURS FOR CLASSROOM INSTRUCTORS LABOR GUARANTEES RENTAL OF EQUIPMENT MAINTENANCE (IF ANY) OF RENTAL EQUIPMENT RENT (LAND OR OFFICE) UTILITY BILLS OFFICE SUPPLIES TRAVEL EXPENSES AND MEALS FOR TRAINERS OR CONSULTANTS MEDICAL EXPENSES FOR NEW ENTRY OR PIT PHYSICALS TRAINING MATERIALS (PURCHASED OR DEVELOPMENT) TRAINING OF NON-ILA PERSONNEL