COURSE OVERVIEW ME1166
ATK Fuel Handler

Course Title
ATK Fuel Handler

Course Date/Venue
July 28-August 01, 2025/TBA Meeting Room,
Grand Millennium Al Wahda Hotel,
Abu Dhabi, UAE

Course Reference
ME1166

Course Duration/Credits
Five days/3.0 CEUs/30 PDHs

Course Description

This practical and highly-interactive course includes real-life case studies where participants will be engaged in a series of interactive small groups and class workshops.

This course is designed to provide participants with a detailed and up-to-date overview of ATK Fuel Handler. It covers the composition of ATK, common grades and specifications, key physical and chemical properties and uses in aviation operations; the ATK fuel supply chain, hazards associated with ATK, regulatory standards and compliance and roles and responsibilities of ATK fuel handlers; the various types of PPE for fuel handling, correct usage and limitations and PPE inspection, maintenance, disposal and replacement; the types of fuel storage tanks including design and safety features, routine storage inspections and maintenance of storage systems; the fuel dispensing systems, fuel quality control procedures, fuel testing methods and ATK fuel filtration systems; and the documentation and record-keeping.

During this interactive course, participants will learn the refueling vehicle types and operations and fuel hydrant systems; the aircraft refueling procedures and prevention of fuel contamination; the safety precautions during refueling, environmental considerations and fuel spill response procedures; the causes of fuel fires and explosions; the fire extinguishers and equipment, emergency evacuation protocols and coordination with fire services; the first aid for fuel exposure, incident investigation procedures, emergency communication systems and advanced fuel quality management; the fuel handling in extreme conditions, international best practices and competency assessment for fuel handlers; and the continuous improvement in fuel handling.

Course Objectives

Upon the successful completion of this course, each participant will be able to:-

- Get certified as a "*Certified Aviation Turbine Kerosene (ATK) Fuel Handler*"
- Discuss the composition of ATK, common grades and specifications, key physical and chemical properties and uses in aviation operations
- Recognize ATK fuel supply chain, hazards associated with ATK, regulatory standards and compliance and roles and responsibilities of ATK fuel handlers
- Identify the various types of PPE for fuel handling and correct usage and limitations as well as apply PPE inspection, maintenance, disposal and replacement
- Recognize the types of fuel storage tanks including design and safety features and carryout routine storage inspections and maintenance of storage systems
- Apply fuel dispensing systems, fuel quality control procedures, fuel testing methods, ATK fuel filtration systems and documentation and record-keeping
- Discuss refueling vehicle types and operations and fuel hydrant systems as well as employ aircraft refueling procedures and prevention of fuel contamination
- Implement safety precautions during refueling, environmental considerations and fuel spill response procedures
- Identify the causes of fuel fires and explosions, use fire extinguishers and equipment and apply emergency evacuation protocols and coordination with fire services
- Carryout first aid for fuel exposure, incident investigation procedures, emergency communication systems and advanced fuel quality management
- Employ fuel handling in extreme conditions, international best practices, competency assessment for fuel handlers and continuous improvement in fuel handling

Exclusive Smart Training Kit - H-STK®

*Participants of this course will receive the exclusive "Haward Smart Training Kit" (**H-STK®**). The **H-STK®** consists of a comprehensive set of technical content which includes **electronic version** of the course materials conveniently saved in a **Tablet PC**.*

Who Should Attend

This course provides an overview of all significant aspects and considerations of ATK fuel handling for fuel handlers and operators, fuel farm technicians, aviation ground crew, maintenance technicians, quality control and safety officers, airport and heliport operators, firefighters and emergency responders and other technical staff.

Accommodation

Accommodation is not included in the course fees. However, any accommodation required can be arranged at the time of booking.

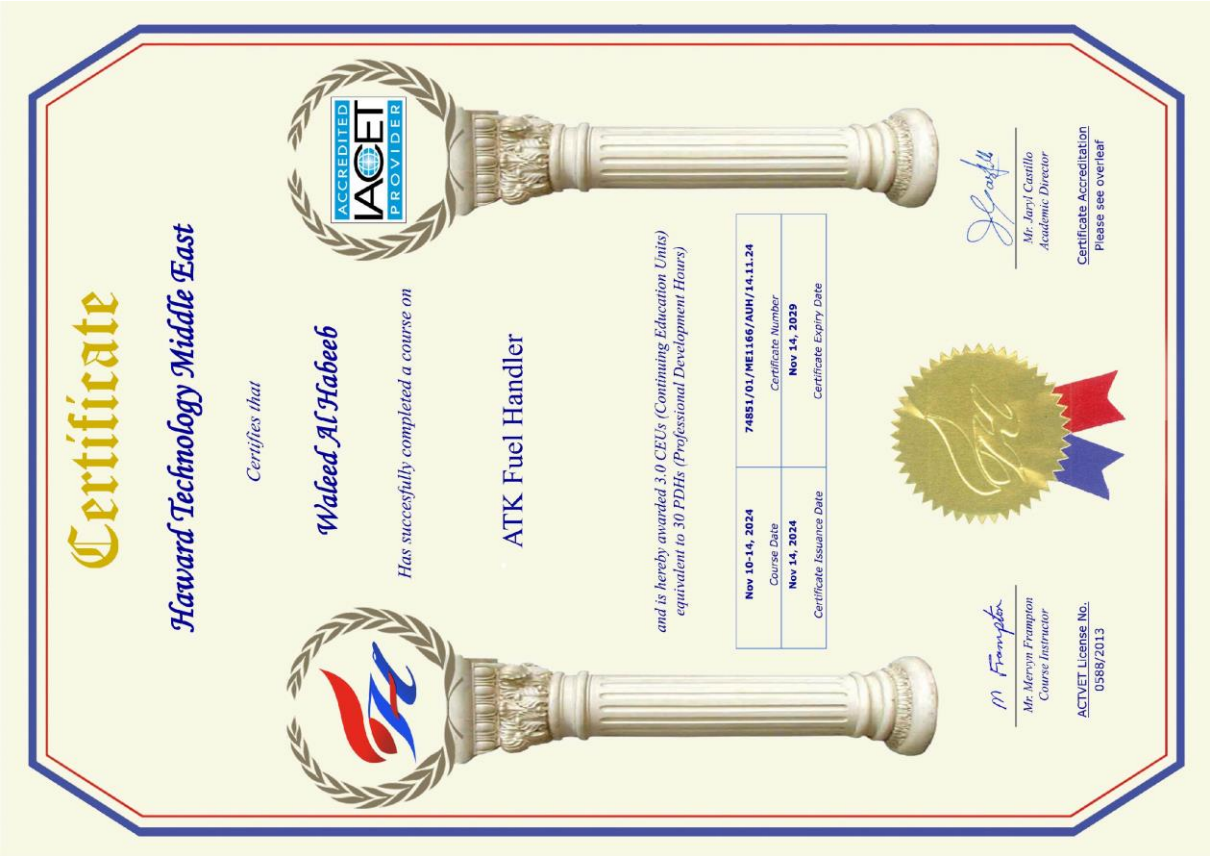
Course Certificate(s)

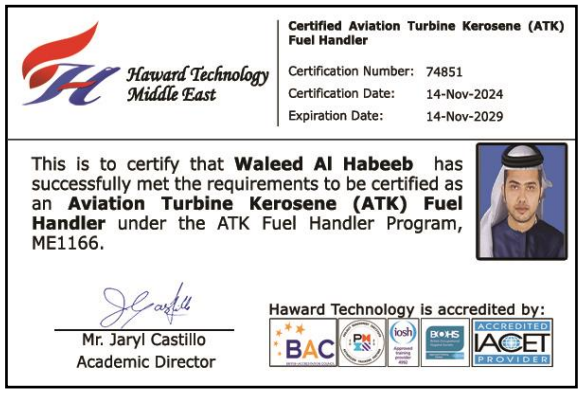
(1) Internationally recognized Competency Certificates and Plastic Wallet Cards will be issued to participants who completed a minimum of 80% of the total tuition hours and successfully passed the exam at the end of the course. Successful candidate will be certified as a *"Certified Aviation Turbine Kerosene (ATK) Fuel Handler*". Certificates are valid for 5 years.

Recertification is FOC for a Lifetime.

Sample of Certificates

The following are samples of the certificates that will be awarded to course participants: -





(2) Official Transcript of Records will be provided to the successful delegates with the equivalent number of ANSI/IACET accredited Continuing Education Units (CEUs) earned during the course.

Haward Technology Middle East

Continuing Professional Development (HTME-CPD)

CEU Official Transcript of Records

TOR Issuance Date: 14-Nov-24

HTME No. 74851

Participant Name: Waleed Al Habeeb

Program Ref.	Program Title	Program Date	No. of Contact Hours	CEU's
ME1166	ATK Fuel Handler	Nov 10-14, 2024	30	3.0

Total No. of CEU's Earned as of TOR Issuance Date **3.0**

TRUE COPY

Jaryl Castillo
Academic Director

Haward Technology has been approved as an Accredited Provider by the International Association for Continuing Education and Training (IACET), 2201 Cooperative Way, Suite 600, Herndon, VA 20171, USA. In obtaining this approval, Haward Technology has demonstrated that it complies with the ANSI/IACET 1-2018 Standard which is widely recognized as the standard of good practice internationally. As a result of their Authorized Provider membership status, Haward Technology is authorized to offer IACET CEUs for programs that qualify under the ANSI/IACET 1-2018 Standard.

Haward Technology's courses meet the professional certification and continuing education requirements for participants seeking Continuing Education Units (CEUs) in accordance with the rules & regulations of the International Association for Continuing Education & Training (IACET). IACET is an international authority that evaluates programs according to strict, research-based criteria and guidelines. The CEU is an internationally accepted uniform unit of measurement in qualified courses of continuing education.

Haward Technology is accredited by

P.O. Box 26070, Abu Dhabi, United Arab Emirates | Tel.: +971 2 3091 714 | E-mail: info@haward.org | Website: www.haward.org

Certificate Accreditations

Haward's certificates are accredited by the following international accreditation organizations:

- British Accreditation Council (BAC)

  Haward Technology is accredited by the **British Accreditation Council** for **Independent Further and Higher Education** as an **International Centre**. Haward's certificates are internationally recognized and accredited by the British Accreditation Council (BAC). BAC is the British accrediting body responsible for setting standards within independent further and higher education sector in the UK and overseas. As a BAC-accredited international centre, Haward Technology meets all of the international higher education criteria and standards set by BAC.

- The International Accreditors for Continuing Education and Training (IACET - USA)

  Haward Technology is an Authorized Training Provider by the International Accreditors for Continuing Education and Training (IACET), 2201 Cooperative Way, Suite 600, Herndon, VA 20171, USA. In obtaining this authority, Haward Technology has demonstrated that it complies with the **ANSI/IACET 2018-1 Standard** which is widely recognized as the standard of good practice internationally. As a result of our Authorized Provider membership status, Haward Technology is authorized to offer IACET CEUs for its programs that qualify under the **ANSI/IACET 2018-1 Standard**.

  Haward Technology's courses meet the professional certification and continuing education requirements for participants seeking **Continuing Education Units** (CEUs) in accordance with the rules & regulations of the International Accreditors for Continuing Education & Training (IACET). IACET is an international authority that evaluates programs according to strict, research-based criteria and guidelines. The CEU is an internationally accepted uniform unit of measurement in qualified courses of continuing education.

  Haward Technology Middle East will award **3.0 CEUs** (Continuing Education Units) or **30 PDHs** (Professional Development Hours) for participants who completed the total tuition hours of this program. One CEU is equivalent to ten Professional Development Hours (PDHs) or ten contact hours of the participation in and completion of Haward Technology programs. A permanent record of a participant's involvement and awarding of CEU will be maintained by Haward Technology. Haward Technology will provide a copy of the participant's CEU and PDH Transcript of Records upon request.

Course Fee

US$ 5,500 per Delegate + **VAT**. This rate includes H-STK® (Haward Smart Training Kit), buffet lunch, coffee/tea on arrival, morning & afternoon of each day.

Course Instructor(s)

This course will be conducted by the following instructor(s). However, we have the right to change the course instructor(s) prior to the course date and inform participants accordingly:

Mr. Mervyn Frampton, BSc, PMI-PMP, CSSBB, is a **Senior Process Engineer** with over **30 years** of industrial experience within the **Oil & Gas**, **Refinery**, **Petrochemical** and **Utilities** industries. His expertise lies extensively in the areas of **Aviation Fueling Operations**, **Fuel Storage & Management**, **Process Unit Operations & Maintenance**, **Operations Asset Process Plant** Start-up & Commissioning, **Process Plant** Monitoring, **Process Plant** Optimization, **Revamping & Debottlenecking**, **Process Plant** Troubleshooting & Engineering Problem Solving, **Integrity**, **Flare**, **Blowdown & Pressure Relief Systems** Operation, Maintenance & Troubleshooting, Dynamics of the **Petrochemicals Industry**, Understanding the **Global Petrochemical Industry**, **Petrochemicals** Analysis, **Naphtha & Condensate** in **Petrochemicals**, **Feedstock** Handling & Storage, **Natural Gas Liquids & Petrochemical Industry** and **Markets**, **Refinery & Process Industry**, **Refinery** Optimization, **Refinery** Operations Troubleshooting, **Refinery** Production Operations, **Refinery Process Safety**, **Process Safety Design**, **Petroleum Refinery** Process, **Asset Operational Integrity**, **Refinery Induction**, **Crude Distillation**, **Crude Oil Properties**, **Distillation Column** Operation & Control, **Oil Movement** Storage & Troubleshooting, Root Cause Analysis (**RCA**) for **Process & Equipment Failures**, **Process Equipment** Design, Applied **Process Engineering** Elements, **Catalyst** Selection & Production Optimization, Operations Abnormalities & Plant Upset, **Clean Fuel** Technology & Standards, **Oil & Gas Field Commissioning** Techniques, **Pressure Vessel** Operation, **Gas Processing**, **Chemical** Engineering, **Process Reactors** Start-Up & Shutdown, **Gasoline Blending** for Refineries, **Urea Manufacturing** Process Technology, Continuous Catalytic Reformer (**CCR**), **De-Sulfurization** Technology, Advanced Operational & Troubleshooting Skills, Principles of Operations Planning, **Rotating Equipment** Maintenance & Troubleshooting, **Hazardous Waste Management & Pollution Prevention**, **Heat Exchangers & Fired Heaters** Operation & Troubleshooting, **Energy Conservation** Skills, **Catalyst Technology**, **Chemical Analysis**, **Process Plant**, **Commissioning & Start-Up**, **Alkylation**, **Hydrogenation**, **Dehydrogenation**, **Isomerization**, **Hydrocracking & De-Alkylation**, **Fluidized Catalytic Cracking**, **Catalytic Hydrodesulphuriser**, **Kerosene Hydrotreater**, **Thermal Cracker**, **Catalytic Reforming**, **Polymerization**, **Polyethylene**, **Polypropylene**, Pilot Water Treatment Plant, **Gas Cooling**, **Cooling Water Systems**, Effluent Systems, Material Handling Systems, **Gasifier**, **Gasification**, Coal Feeder System, **Sulphur Extraction Plant**, **Acid Plant Revamp** and **Crude Pumping**. Further, he is also well-versed in HSE Leadership, Project and Programme Management, Project Coordination, Project Cost & Schedule Monitoring, Control & Analysis, Team Building, Relationship Management, Quality Management, Performance Reporting, Project Change Control, Commercial Awareness and Risk Management.

During his career life, Mr. Frampton held significant positions as the **Site Engineering Manager**, **Senior Project Manager**, **Project Engineering Manager**, **Construction Manager**, **Site Manager**, **Area Manager**, **Procurement Manager**, **Factory Manager**, **Technical Services Manager**, **Senior Project Engineer**, **Project Engineer**, **Assistant Project Manager**, **Handover Coordinator** and **Engineering Coordinator** from various international companies such as the **Fluor Daniel**, **KBR** South Africa, **ESKOM**, MEGAWATT PARK, CHEMEPIC, PDPS, CAKASA, **Worley Parsons**, Lurgi South Africa, **Sasol**, **Foster Wheeler**, **Bosch** & **Associates**, **BCG** Engineering Contractors, Fina Refinery, Sapref Refinery, Secunda Engine Refinery just to name a few.

Mr. Frampton has a **Bachelor's** degree in **Industrial Chemistry** from **The City University** in **London**. Further, he is a **Certified Project Management Professional** (**PMI-PMP**), a **Certified Six Sigma Black Belt** (**CSSBB**) from **The International Six Sigma Institute**, a **Certified Internal Verifier/Trainer/Assessor** by the **Institute of Leadership & Management** (**ILM**), a **Certified Instructor/Trainer** and has delivered numerous trainings, courses, workshops, conferences and seminars internationally.

Training Methodology

All our Courses are including **Hands-on Practical Sessions** using equipment, State-of-the-Art Simulators, Drawings, Case Studies, Videos and Exercises. The courses include the following training methodologies as a percentage of the total tuition hours:-

30% Lectures
20% Practical Workshops & Work Presentations
30% Hands-on Practical Exercises & Case Studies
20% Simulators (Hardware & Software) & Videos

In an unlikely event, the course instructor may modify the above training methodology before or during the course for technical reasons.

Course Program

The following program is planned for this course. However, the course instructor(s) may modify this program before or during the workshop for technical reasons with no prior notice to participants. Nevertheless, the course objectives will always be met:

Day 1: ***Monday, 28th of July 2025***

0730 – 0800	*Registration & Coffee*
0800 – 0815	*Welcome & Introduction*
0815 – 0830	***PRE-TEST***
0830 – 0930	***Overview of Aviation Turbine Kerosene (ATK)*** *Definition and Composition of ATK • Common Grades and Specifications • Key Physical and Chemical Properties • Uses in Aviation Operations*
0930 – 0945	*Break*
0945 – 1030	***ATK Fuel Supply Chain*** *Refining and Production Sources • Storage and Transportation • Fuel Supply Logistics to Airports • Fuel Quality Assurance Measures*
1030 – 1130	***Hazards Associated with ATK*** *Fire and Explosion Risks • Health Hazards (Inhalation, Skin Contact) • Environmental Hazards • Electrostatic Discharge Risks*
1130 – 1215	***Regulatory Standards & Compliance*** *ICAO and IATA Fuel Handling Standards • National Aviation Fuel Regulations • Environmental Compliance (e.g., EPA) • Safety Audit and Inspection Requirements*
1215 – 1230	*Break*
1230 – 1330	***Roles & Responsibilities of ATK Fuel Handlers*** *Key Duties of Fuel Handlers • Fuel Handler Certification Requirements • Reporting Procedures and Documentation • Emergency Roles and Protocols*
1330 – 1420	***Personal Protective Equipment (PPE) for Fuel Handlers*** *Types of PPE for Fuel Handling • Correct Usage and Limitations • PPE Inspection and Maintenance • PPE Disposal and Replacement*
1420 – 1430	***Recap*** *Using this Course Overview, the Instructor(s) will Brief Participants about the Topics that were Discussed Today and Advise Them of the Topics to be Discussed Tomorrow*
1430	*Lunch & End of Day One*

Day 2: Tuesday, 29th of July 2025

0730 – 0830	***ATK Fuel Storage Facilities*** *Types of Fuel Storage Tanks • Design and Safety Features • Routine Storage Inspections • Maintenance of Storage Systems*
0830 – 0930	***Fuel Dispensing Systems*** *Types of Fuel Dispensing Equipment • Operation and Control Systems • Maintenance and Calibration • Leak Detection Systems*
0930 – 0945	*Break*
0945 – 1100	***Fuel Quality Control Procedures*** *Importance of Fuel Quality in Aviation • Contaminants and Their Sources • Daily Quality Checks • Sampling and Testing Frequency*
1100 – 1215	***Fuel Testing Methods*** *Water Detection Methods • Density and Temperature Testing • Filtration and Cleanliness Checks • Electrostatic Hazard Testing*
1215 – 1230	*Break*
1230 – 1330	***ATK Fuel Filtration Systems*** *Types of Filtration Units • Filter Change and Maintenance • Filter Efficiency Checks • Recognizing Filter Failure Signs*
1330 – 1420	***Documentation & Record-Keeping*** *Fuel Transfer Records • Quality Test Logbooks • Incident Reporting Forms • Compliance Record Management*
1420 – 1430	***Recap*** *Using this Course Overview, the Instructor(s) will Brief Participants about the Topics that were Discussed Today and Advise Them of the Topics to be Discussed Tomorrow*
1430	*Lunch & End of Day Two*

Day 3: Wednesday, 30th of July 2025

0730 – 0830	***Refueling Vehicle Types & Operations*** *Types of Refueling Vehicles • Refueling System Components • Refueling Sequence and Procedures • Vehicle Inspection and Readiness*
0830 – 0930	***Fuel Hydrant Systems*** *Design of Fuel Hydrant Systems • Hydrant Pit Equipment and Safety • Hydrant Operation Protocols • Emergency Shutdown Systems*
0930 – 0945	*Break*
0945 – 1100	***Aircraft Refueling Procedures*** *Overwing versus Underwing Refueling • Fuel Flow Control • Safety Precautions during Refueling • Communication with Flight Crew*
1100 – 1215	***Prevention of Fuel Contamination*** *Sources of Contamination During Fueling • Cross-Contamination Avoidance • Draining and Sampling Procedures • Handling Suspect Fuel*
1215 – 1230	*Break*
1230 – 1330	***Safety Precautions during Refueling*** *Fire Prevention Measures • Anti-Static Bonding and Grounding • Spill Prevention and Control • Emergency Stop Procedures*
1330 – 1420	***Environmental Considerations*** *Spill Response Planning • Waste Fuel Handling and Disposal • Impact of ATK Spills • Use of Containment Equipment*
1420 – 1430	***Recap*** *Using this Course Overview, the Instructor(s) will Brief Participants about the Topics that were Discussed Today and Advise Them of the Topics to be Discussed Tomorrow*
1430	*Lunch & End of Day Three*

Day 4: Thursday, 31st of July 2025

0730 – 0830	***Fuel Spill Response Procedures*** *Spill Response Planning • Containment and Recovery Techniques • Use of Absorbents and Barriers • Decontamination Procedures*
0830 – 0930	***Fire & Explosion Response*** *Causes of Fuel Fires and Explosions • Use of Fire Extinguishers and Equipment • Emergency Evacuation Protocols • Coordination with Fire Services*
0930 – 0945	*Break*
0945 – 1100	***First Aid for Fuel Exposure*** *Treatment for Skin Contact • Eye Wash and Injury Procedures • Inhalation Exposure Response • Reporting and Medical Follow-up*
1100 – 1215	***First Aid for Fuel Exposure*** *Treatment for Skin Contact • Eye Wash and Injury Procedures • Inhalation Exposure Response • Reporting and Medical Follow-up*
1215 – 1230	*Break*
1230 – 1330	***Emergency Communication Systems*** *Alert and Notification Protocols • Internal and External Communication • Roles of Emergency Response Teams • Post-Incident Briefings*
1330 – 1420	***Simulated Emergency Drills*** *Planning and Execution of Drills • Role-Playing Emergency Scenarios • Evaluation and Debriefing • Continuous Improvement Actions*
1420 – 1430	***Recap*** *Using this Course Overview, the Instructor(s) will Brief Participants about the Topics that were Discussed Today and Advise Them of the Topics to be Discussed Tomorrow*
1430	*Lunch & End of Day Four*

Day 5: Friday, 01st of August 2025

0730 – 0830	***Advanced Fuel Quality Management*** *Microbiological Contamination Control • Additives and Their Handling • Fuel Recirculation Practices • Advanced Sampling Techniques*
0830 – 0930	***Fuel Handling in Extreme Conditions*** *Hot Weather Fuel Handling Risks • Cold Weather Fuel Handling Risks • Procedures during Lightning and Storms • Handling Fuel during Aircraft Emergencies*
0930 – 0945	*Break*
0945 – 1100	***International Best Practices*** *Comparison of Global Fuel Handling Standards • Lessons Learned from Incidents • Emerging Technologies in Fuel Handling • Sustainability Practices in Fuel Operations*
1100 – 1215	***Competency Assessment for Fuel Handlers*** *Written Knowledge Tests • Practical Skill Demonstrations • Observation and Feedback Sessions • Certification of Competency*
1215 – 1230	*Break*

1230 – 1300	***Continuous Improvement in Fuel Handling*** *Safety Culture Development • Reporting Near Misses and Hazards • Participation in Fuel Safety Audits • Contribution to Fuel Handling SOP Updates*
1300 – 1315	***Course Conclusion*** *Using this Course Overview, the Instructor(s) will Brief Participants about the Course Topics that were Covered During the Course*
1315 – 1415	***COMPETENCY EXAM***
1415 – 1430	*Presentation of Course Certificates*
1430	*Lunch & End of Course*

Practical Sessions

This practical and highly-interactive course includes real-life case studies and exercises:-

Course Coordinator

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