



Taipei Rapid Transit Systems – Tucheng Line Extension to Dingpu, Taiwan

MAA Bulletin

Issue 43-44 July 2008

Founded in 1975, **MAA** is a leading Asian engineering and consulting service provider in the East and Southeast Asian region focused in the areas of infrastructure, land resources, environment, buildings, and information technology.

To meet the global needs of both public and private clients, MAA has a full range of engineering capabilities to provide clients with integrated solutions - ranging from conceptual planning, general consultancy, engineering design to project management.

Today, MAA has 700 people with companies in the Greater China Region (Beijing, Hong Kong, Shanghai, Taiwan), Mekong Region (Bangkok), and Southeast Asia Region (Penang, Singapore), creating a close professional network in East/Southeast Asia.

MAA's goal is to establish engineering capability that will meet local needs. Along with the changes in social-economic environment over the years, MAA's business philosophy is to provide professional service that will become an asset to clients with long lasting benefits. **ASSET** represents five key components that underlies MAA's principles of professional service:

Advanced Technology
 project **S**afety
 client's **S**atisfaction
Economical Solution
Timely Completion

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ISO 9001 CERTIFICATIONS



NEW APPOINTMENT OF COMPANY OFFICERS

NEW OFFICERS

MAA Group Consulting Engineers is pleased to announce the following new appointment of company officers:

• MAA Holding

- Dr. Za-Lee Moh Chairman Emeritus (Founder)
- Dr. Za-Chieh Moh Chairman of the Board of Directors (Founder)

• Moh And Associates, Inc. (MAA Taiwan)

Effective 1 January 2008

- Dr. Za-Lee Moh Chairman Emeritus and Director
- Dr. Za-Chieh Moh Chairman of the Board of Directors
- Mr. Chien-I Hsu Director and President
- Mr. Richard JC Moh Vice President of Corporate Development and Special Assistant to the Chairman

• MAA Engineering Consultants (Shanghai) Co. Ltd.

Effective 1 July 2007

- Dr. Za-Chieh Moh Chairman of the Board of Directors
- Mr. Steve H.L. Wang Director and President
- Ms. Victoria Zhou Vice President

PROFILES

• Mr. Chien-I Hsu, President of MAA Taiwan

Mr. Chien-I Hsu joined MAA as the Administration Senior Vice President in January 2006. Mr. Hsu, a graduate from Chung Yuen University and Asian Institute of Technology, was the former President and Chairman of Resource Engineering Services Inc. (a member of CTCI Group). Mr. Hsu has been involved in all kinds of engineering planning and design of major projects including civil, structural, geotechnical and transportation engineering. He was elected to hold many



Mr. Chien-I Hsu (right), at the Value Management Institute of Taiwan (VMI) Presidential Handover ; Mr. Gi-De Chang (left), Past President of VMI

important positions in engineering institutions including: Director of The Chinese Association of Engineering Consultants, Chinese Society of Structural Engineering, and Chinese Society of Steel Structural Engineering; Supervisor of The Taipei Federation of Engineering Consultants; Committee Member for selection of outstanding young engineers for The Chinese Institute of Engineers; Member of Assessment Committee of Technical Colleges for the Ministry of Education; Member of the Technical Committee for the Bureau of Inspection, MOEA etc. Mr. Hsu has many general engineering experiences in past years. During his tenure at CTCI/RESI, he has completed hundreds of design and construction services on national infrastructure projects such as the Nantz export zone, refinery in Kaohsiung and Tao-Yuen, LNG terminal station, CPC trunk lines and oil storage areas, Second Freeway extension project, Taipei MRT underground mall project, Taiwan High Speed Rail project, Taipei and Kaohsiung MRT system projects, and transmission lines of Taiwan Power company. He played a very important role and had a great contribution to the infrastructure development in Taiwan. Mr. Hsu is also a pioneer to lead a team to develop the special piling method with low noise and low vibration. This method is now a popular method used in many of the engineering projects in Taiwan. Mr. Hsu introduced and advocated the ground freezing technology skill and successfully completed the pilot test in National Yunlin University of Science & Technology. It is a big step to improve the technical capability in the field of geotechnical engineering in Taiwan.

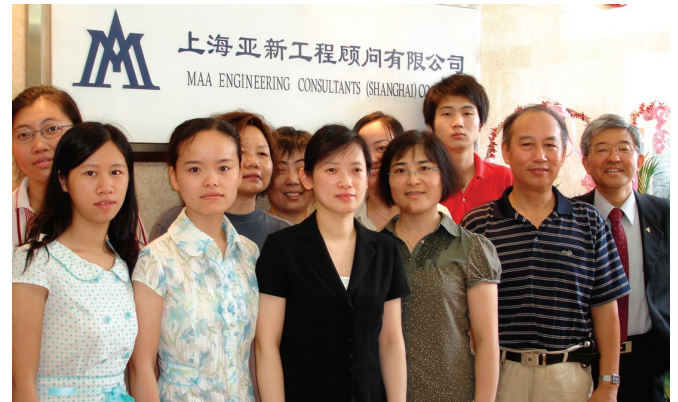
• *Mr. Steve H.L. Wang, President of MAA Shanghai*



MAA Shanghai President Mr. Steve H.L. Wang, staff and Vice President Ms. Victoria Zhou

Mr. Steve H.L. Wang joined MAA since 1984 as Senior Structural Engineer of MAA Taiwan. Prior to taking the position of President of MAA Shanghai, Mr. Wang was the Senior Vice President in charge of Construction Management Department and Development and Planning Department of MAA Taiwan. He currently is also a Director of MAA Holding Board and Director of MAA Taiwan. Mr. Wang has been heavily involved in MAA's expansion in China since the market opening in the early 1990s. He is a member of various professional institutions such as Director of Committee on International and Cross-Strait Affairs, Chinese Association of Engineering Consultants and China Road Federation. His works include infrastructure projects ranging from detailed structural design of flyovers, viaducts and freeways, bridges and tunnels in Taiwan, Singapore, and Vietnam to project & construction management of industrial plants, buildings (Hsin Kong Life Insurance Tower, tallest building in Taiwan when built), New Air cargo terminal at Kaohsiung International Airport, Nankang Software Park, Main Stadium for 2009 World Games in Kaohsiung, etc. Mr. Wang also has undertaken works in the field of privatization including planning and tendering for BOT project of Nanjing Mass Rapid Transit System, China; general consultant for BOT project of transit link between CKS International Airport and Taipei downtown; feasibility study and programming for privatization of Tainan Mass Rapid Transit System; feasibility study and programming for privatization of Keelung Harbor Service Center; and Electronic Tolling System for Taiwan Freeway network. Mr. Wang received both his bachelor's and master's degree in civil engineering from the National Taiwan University and has published over 20 technical papers.

MAA SHANGHAI - NEW OFFICE



MAA Shanghai President Mr. Steve H.L. Wang, Staff and Vice President Ms. Victoria Zhou

MAA Engineering Consultants (Shanghai) Co., Ltd. was established in 1994 as a joint-venture between MAA and SPIDI (Shanghai Pharmaceutical Industry Design Institute). In 2002, SPIDI was merged into SINOPEC Shanghai Engineering Company (SSEC). Upon the joint-venture expiration in 2006, MAA bought back the share of SSEC to become a fully owned subsidiary of MAA Group.

MAA Shanghai provides engineering design, consultancy and management services for projects in the sectors of chemical, petro-chemical, pharmaceutical and buildings. Since its inauguration, the firm has successfully delivered over 800 projects in the captioned sectors. These projects are geographically spread throughout all provinces and major cities in China.

MAA Shanghai obtained and maintained the Class-A Design License in chemical-petrochemical- pharmaceutical and buildings sectors, as well as Class-A Consultancy License in pharmaceutical, chemical and building sectors. The firm is entitled to handle projects in the relevant sectors without limitation in project location and scale. Furthermore, the firm is also allowed to perform environmental protection design services in relevant projects. Currently, MAA Shanghai has over 150 professional staffs, among which over 25% are registered professionals and nearly 40% are senior engineers. These staffs are equipped with certified quality management, environmental management and OHS management systems. All of the relevant projects delivered conform to national GMP, US FDA or EU EDQM standards.

Establishment of Agiletech



The Opening Ceremony of AECC, Executive Management of founding Companies, BUEDRI and MAA



Mr. Minhua Song, President of BUEDRI and Dr. Za-Chieh Moh, Chairman of MAA

AGILETECH Engineering Consultants Co. Ltd. (AECC) is a newly established engineering consulting company, founded by Beijing Urban Engineering Design & Research Institute Co., Ltd., Beijing Urban Construction Exploration & Surveying Design Research Institute Co., Ltd., and MAA Engineering Consultants International Ltd.

AECC is the first Joint Venture company in the People's Republic of China to provide specialized engineering consulting services in engineering safety/risk assessment, management, and development of risk management technology. Currently, AECC focuses on providing safety/risk management services for rail transportation facility constructions.

The opening ceremony of AECC was held on 19 July 2007. Many leaders from major government agencies attended the ceremony, including China National Association of Engineering Consultants, China Communications and Transportation Association, Beijing Municipal Construction Committee, Beijing Municipal Transportation Committee, Beijing Municipal Roadway Administration Bureau, Beijing Infrastructure Investment Co., Beijing Rail Construction and Management Co., and Beijing Mass Transit Railway Operation Corp. The official company plaque was unveiled by Mr. She Jian-min, President of the China National Association of Engineering Consultants and Mr. Xu Rong-lie, former Chief Engineer of the Ministry of Construction.

Both BUEDRI and MAA appointed personnel to key positions of AECC, namely Chairman Mr. Xiu-ren Yang (楊秀仁) and President Mr. Huai Jim (金淮) from BUEDRI and Technical Vice President Mr. Shaw-Wei Duann (段紹緯) from MAA.

Projects-1st May 2007 to 30th October 2007

PROPOSED HOUSING DEVELOPMENT AT SIU LAM, NEW TERRITORIES, HONG KONG

MAAHK was engaged by S.W. Law & Associates Architects & Development Consultants Ltd. as geotechnical consultant for the proposed residential development comprising twelve blocks of four-storey town houses on slopeland at Siu Lam in New Territories. MAA's scope of services include geotechnical investigation, site formation planning, foundation analysis, stability study and design of landslip preventive works for existing slopes and retaining walls, and construction supervision. The site formation proposal involving slope cutting, retaining walls, slope stabilization piles and stormwater drainage had been approved by the Building Authority. Construction is estimated to start in October 2007.

REC PROJECT APRICUS, SINGAPORE



REC Project

The proposed 54.5 hectares development consists of the construction of four major components, namely Wafer, Cell, Module and Building & Infrastructure over the young reclaimed land built in 2001 at the west part of Singapore. MAA Singapore is engaged by Flour Ireland, program manager to REC client. MAA Singapore provided geotechnical consultancy services including soil investigation works consisting of 63 boreholes and 21 Cone Penetration Tests.

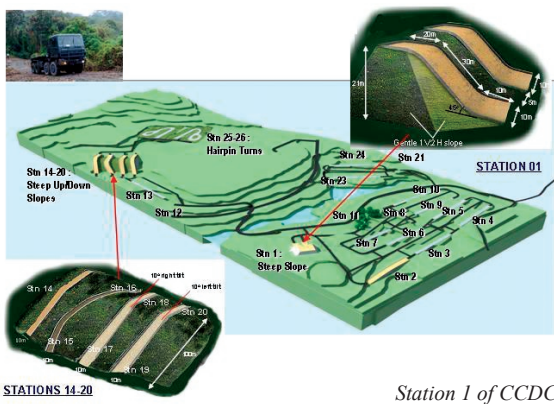
PROPOSED BUSINESS AND FINANCIAL CENTRE (PHASE II) – COMMERCIAL TOWER 3 AT MARINA BOULEVARD / CENTRAL BOULEVARD, SINGAPORE



Commercial Tower 3 at Marina Boulevard / Central Boulevard

The proposed development comprises the construction of one (1) 50-storey commercial building with three levels of basement car parks. The project is located over the young reclaimed land, which is in close proximity to the existing north and south bound MRT tunnels between Raffles Places and Marine South Stations and existing CST tunnels. MAA has provided geotechnical study consisting of drilling 25 deep boreholes with a maximum depth of 90 meters. Due to the close proximity of MRT/CST tunnels and the highly permeable hydraulic sand fill underlying with thick under-consolidated marine clay / localized Granite boulders of old seawalls, thorough field/lab tests are conducted to ensure a safe design of foundation system and excavation works of the proposed building. The project service started from May to August 2007.

**CROSS COUNTRY DRIVING CIRCUIT (CCDC),
MANDAI, SINGAPORE**



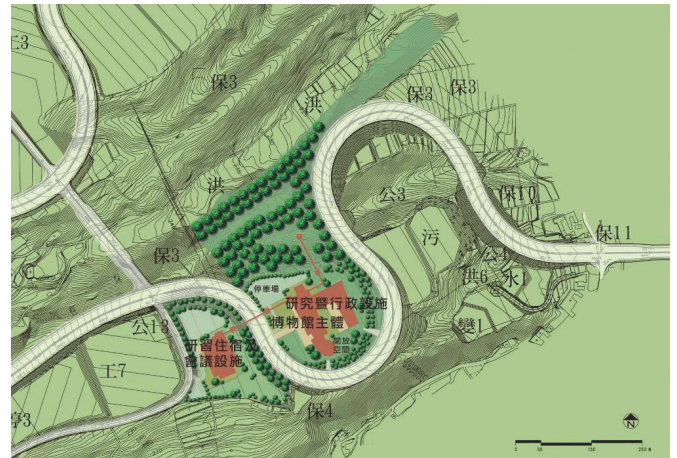
Station 1 of CCDC



CCDC Project

The proposed development consists of the construction of 26 stations and a 3 km circuit within the proposed vicinity of the Cross Country Driving Circuit (CCDC) located at Mandai. The purpose of the CCDC is to allow The Singapore Armed Forces (SAF) to train servicemen fundamental cross-country driving/riding techniques and skills under the controlled environment. The Singapore Armed Forces engaged Samwoh Corporate Pte. Ltd. and MAA Singapore as the Design & Build Consultant team to carry out the project from December 2007 to May 2009. MAA will provide geotechnical design and quality control of fill embankments, including laboratory testing involved in the stations construction works. At Station 01 is the 21 meter high fill embankment with steep slope gradient of 45 degrees to be built using compacted earth and reinforcing geotextile. The 15 meter high Stations 14-20 will require huge volume of compacted fill.

TAIWAN HAKKA CULTURAL CENTER MAIOLI PARK



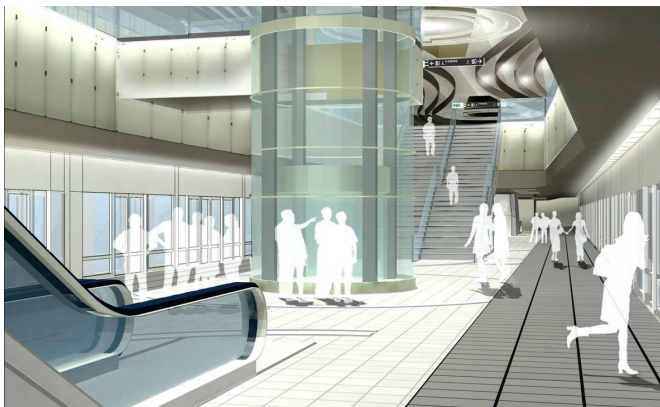
Taiwan Hakka Cultural Center Maioli Park

To promote Taiwan's Hakka culture, the Council for Hakka Affairs under the Executive Yuan plans to build a "Hakka Civilization Museum" and a "Global Hakka Research Center" in "Taiwan Hakka Cultural Center Maioli Park". The total expenditure for the construction is NT\$1,320 million. The construction expects to begin on 2009, and is scheduled for completion by 2011.

On April 27th 2007, MAA was selected to join the project as the Project & Construction Management (PCM) consultant. The scope includes drafting the spatial planning and operation scheme of the Park, assist in holding international competitions, and provide PCM services.

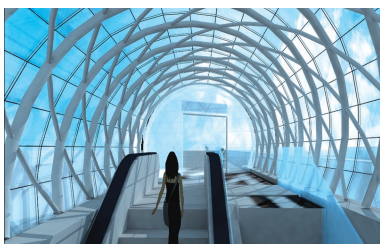
**TAIPEI RAPID TRANSIT SYSTEMS – TUCHENG LINE
EXTENSION TO DINGPU**

Tucheng Line extension is the continuation of MRT network expansion in Taipei City. The project commences from Yongning Station, runs underground along Zhongyang Road Sections 3 and 4, and ends at the Dingpu High-tech Industrial Park. The total length of the extension is 1.967 km, including one underground subway station, a shield tunnel of a length of 1,536 m, and a 139-m-long cut-and-cover tunnel crossover. The shield tunnels are designed with a diameter of 6.1 meters. Five cross passages are planned along the tunnel. Dingpu Station is a two-story underground station with an approximate dimension of 292 m long and 21 m wide. The design work includes



Tucheng Line Extension to Dingpu station

civil, geotechnical, structural, architectural, E & M facilities, environmental control systems, and elevator and lift systems. MAA Taiwan was engaged by the Department of Rapid Transit Systems of Taipei City Government in December 2007 to provide detailed design services and construction consultancy services.



Tucheng Line Extension to Dingpu station

TAIPEI SONGSHAN AIRPORT CAR PARK NO.3



Car Park No.3 of the Taipei Songshan Airport

Car Park No.3 of the Taipei Songshan Airport is located at the southeast corner of the terminal building. MAA Taiwan is engaged by Taipei City Government's Department of Rapid Transit System (DORTS) to provide design and construction supervision services for the car park. MAA's architect is Haigo Shen & Partners, Architects & Engineers. With the establishment of MRT Songshan Airport Station along the Neihu Line, DORTS and Civil Aeronautics Administration of

the Ministry of Transportations and Communications expects a growing flow of cars to the area. In order to meet the demand for more car park space of which Car Park No. 1 and No. 2 cannot meet, it was decided to replace the existing surface-based car park to a multi-storey Car Park No.3.

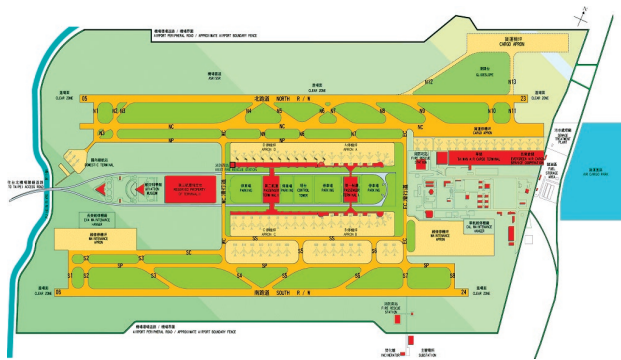


Car Park No.3 of the Taipei Songshan Airport Opening Ceremony

Car Park No. 3 is a three-storey reinforced concrete structure with 66 m in length and 62.5 m in width. With a total floor area of 12,795 m², it can accommodate up to 512 sedans. The construction was commenced in October 2005, and completed in August 2007. Some notable special designs and features make this car park unique. An example is the use of an advanced computer identifying system, that records car's license plates automatically. Furthermore, a new tolling system was installed to integrate information with the rest of six car parks adjacent to the airport.

TAIWAN TAOYUAN INTERNATIONAL AIRPORT REHABILITATION PROJECT

After 30 years in service since commencement, the Taiwan Taoyuan International Airport is in need of major rehabilitation & upgrading to continue the role of "Gateway to the Nation" in coming decades. The Civil Aeronautics Administration of Ministry of Transportation and Communication commissioned MAA - Netherlands Airport Consultants B.V. (NACO) Joint Venture to serve as the General Consultant for the rehabilitation project. Project objectives are to (1) rehabilitate existing runway & taxiway pavements; (2) extend south runway and construct a new north parallel taxiway; (3) upgrade airside facilities to Code 4F; (4) replace/improve navigational aids



Taoyuan International Airport Rehabilitation Project

9NAVAIDS) & airfield ground light system (AGLs); (5) upgrade instrument landing system (ILS); and (6) install Advanced Surface Movement Guidance & Control System (A-SMGCS). Challenges of the Project are to maintain airport operation and to ensure flight safety during construction and installation. The project starts in January 2008 and ends in June 2013.

A FRUITFUL COOPERATION BETWEEN ENTERPRISE AND EDUCATION: TSMC BUILDING IN NATIONAL TSING-HUA UNIVERSITY



Taoyuan International Airport Rehabilitation Project

On 18 April 2008, National Tsing-Hua University (NTHU) held the opening ceremony of the new College of Technology Management TSMC Building. TSMC (Taiwan Semiconductor Inc.), the founder and the world’s largest dedicated semiconductor foundry, committed over NT\$ 180 million to the construction of the NT\$420 million building, with the mission of facilitating industrial and technological progress through supports to education and research institutes. In line with the company’s great emphasis on the collaboration with institutes of

higher education, the Vice Chairman, Dr. F.C. Tseng contributed 15 million of his personal funds to furnish the Sun Yun-Suan (孫運璿) Hall (in memory of the Minister of Economic Affairs and Premier of ROC, Sun Yun-Suan; see Bulletin #40 for details). TSMC Building symbolizes the many years of close cooperation between TSMC and NTHU.

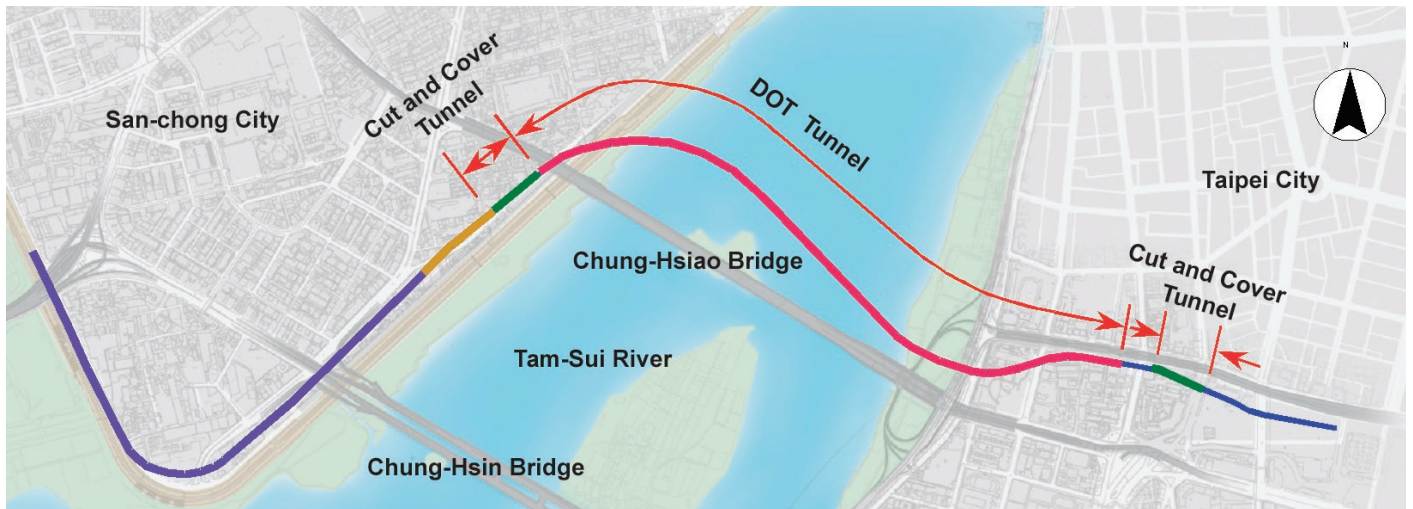
The TSMC Building is a 9-storey (35.7 m high) building with a total of 9787 square-meter in area, with one level of basement. The building includes lecture hall, library, teaching rooms and research rooms, etc. The building structure mainly adopts a reinforced concrete design with steel structures to support the atrium area and the large lecture hall. MAA was engaged by the client to provide project management and construction supervision services, which contributed to the successful completion of the building.

TWELVE AIRPORTS PAVEMENT PCN INSPECTION AND EVALUATION IN TAIWAN



Twelve Airports Pavement PCN Inspection and Evaluation

The Civil Aeronautics Administration under the Ministry of Transportation and Communications commissioned IEE and MAA Taiwan Joint Venture in February 2008 to carry out a study on the pavement bearing capacity and comparability of aircraft types for 12 airports in Taiwan. Airports included in the project are Taipei Songshan airport, Taichung airport, Chiayi airport, Tainan airport, Kaohsiung International airport, Hualien airport, Taitung airport, Lanyu airport, Lyudao airport, Kinmen airport, Cimei airport, and Wang-An airport. MAA is responsible for pavement destructive testing for concrete strength and subgrade CBR testing, safety and quality control, GIS and project management.



Taiwan Taoyuan International Airport Access MRT System – Professional Consulting of Geotechnical Risk Management

TAIWAN TAOYUAN INTERNATIONAL AIRPORT ACCESS MRT SYSTEM – PROFESSIONAL CONSULTING OF GEOTECHNICAL RISK MANAGEMENT

Taiwan is currently designing the airport MRT link from Taipei City to Taoyuan International Airport, which will pass through complex and varying geological conditions. In order to minimize construction risk due to the geological condition, the client developed a project to specifically tackle geotechnical engineering risks. MAA Taiwan, was engaged by the client, Department of Rapid Transit Systems of Taipei City Government, in December 2007 to provide professional consulting of geotechnical risk management. Specifically, MAA will apply geotechnical risk management to the sections where nearby pipelines, structure, and buildings may be affected during the construction. Risk management is also applied to DOT shield tunneling, the first ever double-tube tunneling technique introduced for the MRT system in Taiwan, and obstacles (e.g., driftwoods and methane) encountered during tunneling. The project covers 3.9 km span, ranging from the south end of San-Chong Station (A2 Station) in San-Chong City, Taipei County to the Taipei Station (A1 Station) in Taipei City. Major structures include an 147-m-long viaduct section, one day-lighting section of 233 m long, two cut-and-cover sections with 139 m long on the San Chong City side and 110 m long on the Taipei City side, an 1,585-m-long DOT (Double-O-Tube) shield tunneling section, and an underground station (A1 Station) of 330 m long.

LAND DEVELOPMENT ALONG SANWU RD. OF HSINCHU SCIENCE PARK, TAIWAN



Land Development Along Sanwu RD. of Hsinchu Science Park

In consideration of future needs of industrial development and the current land insufficiency in Hsinchu Science Park, The Science Park Administration choose to replan and redesign the undeveloped area along south Sanwu Road. The new development will meet the demands of wafer factory expansion from TSMC and PSC, etc. The project is located on the boundary of Hsinchu country and Hsingchu City. The total area is 31.53 ha.. MAA was engaged by the client in December 2006 to provide planning, design, and construction supervision services for items such as fences, land preparation, drainage system, sewage system, parks, parking lots, landscaping, public space lighting and common duct etc.

MAITREYA MONASTERY, TAIWAN



The Maitreya Monastery at O-Mei Town in Hsin-Chu County

The World Maitreya Great Tao Organization is a religious establishment aimed to promote the teachings of Maitreya. Maitreya is a bohisattva, who in the Buddhist tradition is to appear on Earth, achieve complete enlightenment and teach the pure dharma. The organization is in the process of developing her headquarters, the Maitreya Monastery at O-Mei Town in Hsin-Chu County. The monastery is a SRC and RC mixed 8-storey building with a 4-level basement. The total construction area is about 9.8 ha. with a total floor area of 150,484 m². Next to the main building is the world's tallest Maitreya statue, standing at a 72m height. The main building is divided into 4 areas including the main hall area, lecture area, and a north & south accommodation areas. The main hall includes a 7-storey high open area which holds a 15m high Maitreya statue, an office wing and a library. Both north and south accommodations have a total of 178 beds with a main lecture area and 6 international conference rooms. There are parking lots that can hold 968 cars, a performance hall with 1500 seats, a central kitchen and a dining hall for 1400 persons in the basement. MAA Taiwan was commissioned in July 2007 to provide construction management services and design review for the client.

OPENING CEREMONY OF BADE CAMPUS, NATIONAL DEFENSE UNIVERSITY, TAIWAN

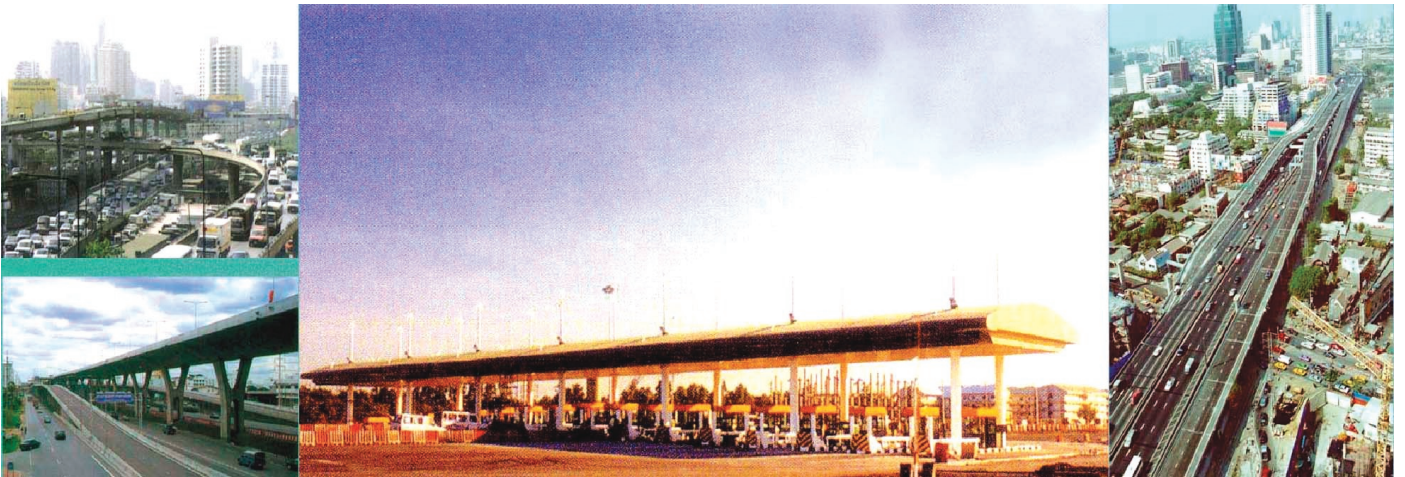


Opening ceremony of Bade Campus, National Defense University



Dr. Za-Lee Moh at the Opening ceremony of Bade Campus, National Defense University

On 17th August, 2007 President Chen Shui Bian moderated the opening ceremony of Bade campus, National Defense University. President Chen applauded all the engineers' and construction teams' contribution and effort of this project during his speech. Special guests who joined the ceremony included Vice President Lu Xiu Lian, Minister of Ministry of National Defense Lee Tian Yu, RSEA Engineering Corporation Chairman Ou Lai-Cheng and E&C Engineering Corporation President Tsai Ying Zhi etc. Bade Campus was constructed by E&C and RSEA Joint Venture. The construction started in November 2003 and ended in April 2007. The project includes 27 buildings such as administrative building, dormitory building, entertainment building, library, gymnasium building etc. MAA was engaged to provide construction supervision and project management services.



Suksawat and Highway 37 Project Thailand

TOLL COLLECTION SYSTEM AND TRAFFIC SAFETY CONTROL SYSTEM FOR EXPRESSWAY ROUTE BANG PLEE – SUKSAWAT AND HIGHWAY 37 PROJECT, THAILAND

The project’s Toll Collection and Traffic Safety Controlling System includes Traffic Controlling and Traffic Safety Management methodology, construction of tollway facilities, and the installation of closed toll collection system located in 6 places (Rama 2, Suksawat, Sukumvit-Srinakarin, Theparak and Wat Saloot) along Bang Plee- Bang Khuntien expressway. In addition to system, the project includes construction of the Control Building, Toll Plaza, Toll Surveillance Building, police station, weighing station, and the roadway connecting between the Toll Plazas (including fence, retaining wall and storm drainage system). MAA Thailand was engaged to provide construction supervision services which includes assistances in construction coordination, review of approved construction related submittals, monitoring of construction activities to ensure compliance with the contract, approval of procedures, plans & specifications, and lastly evaluating and certifying contractor payment applications.

HIGHWAY 338 – PIN KLAO – NAKORN CHAISRI ROUTE, THAILAND

The project is aimed at improving the safety and efficiency of the highway through Nalorn Prathom and Ratchaburi provinces to the southern part of Thailand. The improvement of Highway 338 – Pin klao- Nakorn Chaisri Route will increase the efficiency in goods transporting and tourist traveling to the south. The 25 km project comprises of the improvement of existing Highway 338 and existing elevated interchange, which will promote better safety and mobility in the area. MAA Thailand was engaged by the Department of Highways in Thailand to provide site survey, detailed design of the highway, and assistance to land acquisition and construction estimates.

MOTORWAY 81 ROUTE BAND YAI- KANCHANABURI, THAILAND

The project is aimed at improving the mobility of traffic between Bangkok metropolitan area to the western part of Thailand. The 120 km alignment starts from Bang Yai elevated interchange, passes through Kanchanaburi province and ends with the connection to Highway 8 route Nakorn Pathum – Cha Am. Motorway 81 Route will increase the efficiency in goods transporting to the neighborhood countries along the western border of Thailand and will also drive local economy in the communities along the route. MAA Thailand was engaged by the Department of Highways in Thailand to provide site survey, revision of feasibility study, detailed design of highway, assistance to land acquisition and construction estimates, and tender documents preparation.

NEW MOTORWAY ROUTING PROJECT – MOTORWAY ROUTE 9 WESTBOUND CONNECTING TO HIGHWAY 347 AND LINKING TO MOTORWAY ROUTE 9 EASTBOUND, THAILAND

The purpose of this project was to improve the efficiency of road network in the northern part of Bangkok and sub-urban area by providing a connection between eastbound and westbound roadways. With a total distance of 33 km, the project includes the construction of new motorway and upgrading of existing highway, which will connect to the Bangkok Outer Ring road network. MAA Thailand was engaged by the Department of Highways in Thailand to provide feasibility study, traffic volume study of associated intersections, site survey and interchange detailed design, verification of construction procedures and tender document preparation.

PROFESSIONAL ACTIVITIES

► Professional Activities

- *Professional Activities*
- *Professional Awards/Honors*
- *Professional Registration*
- *International Meetings*
- *Technical Publications*

LECTURES

- Dr. Za-Lee Moh, Chairman of the Board of Moh and Associates, Inc. was invited by the Department of Civil Engineering, China Institute of Technology to deliver a lecture on “*Civil Engineer in the 21st Century (21世紀土木工程師)*” on 3th December, 2007.
- Dr. Za-Lee Moh, Chairman Emeritus of Moh and Associates, Inc. was invited by the College of Architecture & Planning, Chung Hua University to deliver a lecture on “*Civil Engineer vs Consulting Engineers (土木工程師與工程顧問公司)*” on 4th January, 2008.
- Mr. Sio-Keong Kong, General Manager of MAA Singapore was invited by the National University of Singapore (NUS) to deliver a talk on “*Slope Stabilization Works at School of Business (BIZ 2), NUS*” in NUS Workshop on Rainfall-induced Slope Failure on 27 April, 2007.
- Mr. Sio-Keong Kong, General Manager of MAA Singapore was invited by the Singapore Polytechnic to conduct a training course on “*Maintenance of Slope*” for the staff of JTC Management on 26 October 2007 and 23 January 2008.

- Mr. Ta-Hsing Lee, Project Manager of MAA Taiwan Construction Management Department delivered a lecture on “*Experience of Project Management on School Buildings Construction*” for the Nation-wide Professional Schools’ General Administration Directors Conference on 5 November 2007. The conference is sponsored by the Ministry of Education and co-sponsored by National Taiwan University of Technology.
- “*2006 Teachers of Professional Schools Courses - Course on Engineering Practices for Projects from Public Institutes and Private Enterprises*” The Department of Technology and Vocational Education under the Ministry of Education sponsored a series of courses on Engineering Practices for Public Institutes and Private Enterprises Projects for Professional Schools Teachers in 2006. The course theme are divided into six categories: construction, management, tourism & hospitality, culture and biotechnology. Mingshin University of Science and Technology is one of the co-sponsors for this project and commissioned MAA to hold the course entitled, “Case Study and Risk Management for Hazards Mitigation & Deep Excavation.” The course started from 1st August, to 3rd August 2007 with a total of 16 hours for 35 designated trainees. MAA provided the space, lecturers and teaching materials for the course. The course objective is mainly divided into two parts. The first part is a discussion of the change of environment, the impact of global warming and the reflection of construction industry development. The second part is to introduce the history of domestic deep excavation technology, its development in connection with risk management concept, and the practical techniques that can strengthen the domestic professional education.

SEMINAR SPONSORSHIP/CO-SPONSORSHIP

- Letter of appreciation for the “*1st Cross Straits Concrete Technology Seminar*” in 2007 from National Taiwan Ocean University for MAA’s co-sponsorship of the seminar.
- Letter of appreciation from Mingshin University of Science and Technology for MAA to hold a course under the theme “*Engineering Practices for Public Institute and Private Enterprises Projects for Professional Schools teachers in 2007.*”
- Letter of appreciation for MAA’s co-sponsorship of the “*12th Geotechnical Seminar*” from Chaoyang University of Technology.
- Letter of appreciation from Chung-Hua University for MAA’s co-sponsorship of the *11th Construction Engineering and Management Seminar*.
- Certificate of Recognition from Asian Civil Engineering Coordinating Council to MAA in appreciation of outstanding contribution to the success of the *4th Civil Engineering Conference in the Asian Region*.

► Professional Awards / Honors

- Chairman, Dr. Za Chieh Moh, was elected as the **22nd Director of China Road Federation** in November 2007.
- President, Chien-I Hsu, was elected as the **4th President of Value Management Institute of Taiwan** in March 2008.
- Mr. Chin-Der Lin, Manager of Environmental Protection Dept. was elected as the **6th Director of China Taipei Society for Trenchless Technology** in October 2007.
- In December 2007, Dr. Za-Chieh Moh was elected as **Vice President and Director of the 18th Board of Directors of the Chinese Institute of Civil and Hydraulic Engineering** for the period from December 2007 to December 2009.
- Project **Land Acquisition and Development Consultancy Service on New Sinjhuang City Government Center Project Contract No.2** received Best Quality Award on Public Construction Projects by Taipei County Government in 2007.
- Project **Taipei County Roadways Excavation Management System** received the Third Golden GIS Award for Best Application System by Taiwan Geographic Information Society. Taiwan Geographic Information Society created the Golden GIS Award in 2005 to specifically recognize the people and/or products that contributed to the development of Geographic Information System (GIS) field. MAA was awarded the Third Golden GIS Award for the GIS system that manages the roads excavations in Taipei County. The award is a recognition of MAA's continuous efforts to provide clients innovative, user-friendliness, and practicality of an integrated GIS system. The project system is the first and most complete county roadways excavation management system in Taiwan that fully encompasses the engineering characteristics of road excavation and the government's complex management and quality maintenance procedures. Combined with a user-friendly interface and an electronic intelligent map, users can easily use the system to search for news on the latest roadway constructions in vicinity of the selected area.
- Project **Shuai Zhen Project of National Defense University** received a Letter of Appreciation from National Defense University for MAA's quality Construction Project Management Service.
- Project **Taipei Fushing North Road Underpass** received a Team Award on Geotechnical Construction Technology by Taiwan Geotechnical Society.

► Professional Registration

PROJECT MANAGEMENT PROFESSIONAL

Recognizing the importance of project management, MAA encourages her staff to take project management courses held by international recognized Project Management Institute (PMI). PMI provides seminars on the best practices of project management in different industries. Candidates who took the course and have passed the exam are internationally certified as Project Management Professional (PMP). Since 2006, six MAA engineers have successfully received the PMP certificate. They are: Project Manager Dr. Tzu-Jeng Su (蘇子正), Principal Geotechnical Engineer Mr. Chien-Hong Wang (王劍虹), Senior E&M Engineer Wei-Dong Wang (王偉棟), Geotechnical Engineer Mr. Yun-Hui Lai (賴昀暉), Civil Engineer Yong-Jie Huang (黃永傑), Structural Engineer Mu-Kuei Chang (張穆奎).

► International Meetings

FIDIC 2007

The 2007 Annual Conference and General Assembly Meeting of the International Federation of Consulting Engineer (FIDIC) was held on 9th to 13th September 2007 at the Suntec Convention Center in Singapore. The Conference theme was Global Services and Enhanced Partnerships. Four Hundred sixty delegates from 67 countries attended the 3-days event. Dr. Za-Chieh Moh led a delegation of 15 from the Chinese Association of Engineering Consultants, Taipei, including MAA Vice President Richard Moh, attended the conference.

International Seminar for Construction and Operation Safety in China Urban Rail Transport An international seminar on construction and operation safety for Urban Rail Transport was organized by the Chinese Ministry of Construction, the Beijing Chiao tong University and the China Metro Engineering Consulting Co., Ltd. on 21-23 September 2007 in Beijing. Dr. Za-Chieh Moh, one of the 11 theme speakers invited from 10 countries, presented a talk on MRT construction failure and risk management. The seminar was attended by over 100 delegates from many municipal officers, MRT construction and operation agencies in China.

IEM 2007

On 17th-21st June 2007, Dr. Za-Chieh Moh led a delegation of the Chinese Taipei APEC Engineer Monitoring Committee to attend the bi-annual meeting of the International Engineering Meetings (IEM) in Washington D.C., USA. The IEM invitational meeting is a meeting of six international agreements governing the mutual recognition of engineering education and the mobility of professional engineers. The six agreements are the Washington Accord, Sydney accord and Dublin Accord for engineering education, the APEC Engineer agreement, the Engineers Mobility Forum agreement (EMF), and the Engineering Technologist Mobility Forum (ETMF) agreement are the agreements regarding mobility of practicing engineers.

GEO-WCS 2007

About 80 geotechnical engineers of Chinese origin from Taiwan, Hong Kong, China, USA and Europe gathered together for the 3rd World Forum of Chinese Scholars in Geotechnical Engineering on 20-22 August 2007 at the Chiao tong University in Hsinchu, Taiwan. The Conference was organized in the form of several mini-forums. From MAA, Dr. C.T. Chin was a member of the Organizing Committee. He and his colleagues Dr. H.S. Chao, Dr. Daniel Yao, and Mr. T.C. Su presented a paper entitled Drawdown Analysis for Deep Excavation. Dr. Za-Chieh Moh chaired the discussion session on Public Works Forum.

SEMINAR FOR CONSTRUCTION AND OPERATION SAFETY FOR URBAN RAIL

An international seminar on construction and operation safety for Urban Rail Transport was organized by the Chinese Ministry of Construction, the Beijing Chiao tong University and the China Metro Engineering Consulting Co., Ltd. on 21-23 September 2007 in Beijing. Dr. Za-Chieh Moh, one of the 11 theme speakers invited from 10 countries, presented a talk on MRT construction failure and risk management. The seminar was attended by over 100 delegates from many municipal officers, MRT construction and operation agencies in China.

THE 6th FAR EASTERN ARCHITECTURE AWARD CEREMONY AND THE 2nd MR. MEI CHENG INTERNATIONAL LECTURE ON ARCHITECTURE Cecil Balmond Forum on "Informal Networks – Reinventing Space"

The 6th Far Eastern Architecture Award Ceremony, The 2nd Mr. Mei Cheng International Lecture on Architecture, and Taipei Fine Art Museum Forum on Modern Architecture were held together at Taipei Fine Arts Museum on 15th – 16th December 2007. To promote Taiwan's architecture development, the Far Eastern Y.Z. Hsu Science and Technology Memorial Foundation sponsors an annual architecture award ceremony for notable projects in Taiwan. This year, the award ceremony is held together with Tunghai University Department of Architecture's 2nd Mr. Mei Cheng International Lecture on Architecture. Since



Cecil Balmond Lecture

2000, Tunghai University has held a series of lectures in honor of either Tunghai's established alumni or internationally re-known architects. The 2007 lecture, in honor Mr. Mei Cheng, is given by world famous engineer, builder and philosopher, Mr. Cecil Balmond on the theme, "Informal Networks – Reinventing Space." Followed by the inspirational lecture by Mr. Cecil Balmond is a discussion forum by international figures, Deputy Chairman of Ove Arup Cecil Balmond, Japanese Architect Toyo Ito, Harvard University Design School Dean Mohsen Mostafavi, Taiwan Architect Shu Chang, and Chairman of MAA Group Consulting Engineers Za-Chieh Moh. Dr. Moh was specially invited to chair and moderate the forum.

Cecil Balmond is an Arup Fellow, structural engineer and writer, specialising in design for buildings with innovative structures. He is Deputy Chairman of Ove Arup and Partners and also Director of Arup's Advanced Geometry Unit. Working with some of the world's most influential architects, he continues to promote engineering as a totally creative activity. His particular interest lies in promoting an animate sense of geometry using numbers, mathematics and music as vital sources. His recent projects include the Battersea Powerstation redevelopment, the 2002 Serpentine Pavilion in London, New York's World Trade Center, and the CCTV building in Beijing." (Source from OVE ARUP website: <http://www.arup.com/arup/people.cfm?pageid=4373>)

AGSSEA

For the objectives of :

1. The promotion of cooperation among geotechnical societies in Southeast Asia for the advancement of knowledge in geotechnical engineering; and
2. The assistance to member societies who have limited number of members, the Southeast Asian Geotechnical Society (SEAGS) initiated the formation of the Association of Geotechnical Societies in Southeast Asia (AGSSEA) at its Council meeting held on 8 May 2007 in Kuala Lumpur during the 16th Southeast Asian Geotechnical Conference. A Pro-tem Committee was formed to prepare and promote the formation of the Association.

With SEAGS as the initiator, the Vietnam Society for Soil Mechanics and Geotechnical Engineering and the Hong Kong Geotechnical Society (HKIE Geotechnical Division) as the founding members, the AGSSEA held its inaugural meeting on 05 December 2007 in Kuala Lumpur. At the Inaugural Meeting, Ir. Dr. Ooi Teik-Aun of Malaysia, was elected as the first Chairman, Ir. Kenny Yee as the Hon. Secretary-General, Ir. Albert Ho of Hong Kong as the Hon. Treasurer-General. From each member Society, the President and one additional member of that Society are elected as Council Members for Session 2007-1020.

To recognize his contributions, Ir. Dr. Za-Chieh Moh was unanimously elected as the Honorary Founder Chairman of the Association.

COOPERATION BETWEEN IEM AND CIE

To promote and enhance cooperation between the Institution of Engineers Malaysia and the Chinese Institute of Engineers, a MOU was signed between the two institutes on 05 December 2007 at the headquarters of the IEM in Kuala Lumpur. Representing the Chinese Institute of Engineers were Professor Jenn-Chu Chern (Director of CIE), Dr. Za-Chieh Moh Mr. Ter-Chuyan Yu (Chairman and Executive Secretary of the Chinese Taipei APEC Engineering Monitoring Committee, respectively).

► TECHNICAL PUBLICATIONS

Aside from the technical papers written by MAA staff for various journal publications and regional/international seminars, MAA has produced several Technical Documents as means to record MAA's experiences, research and new methodologies. Below are the prefaces of two publications.

ENGINEERING CHARACTERISTICS OF TAIPEI CLAY – MARCH 2007

This booklet contains the paper entitled “Engineering Characteristics of Taipei Clay” prepared for the Second International Workshop on Characterisation and Engineering Properties of Natural Soils. The workshop was held in Singapore between 29 November and 1 December 2006. Taipei Clay is among fifty-eight natural soils of the world documented in two workshops. Natural soils covered in these workshop included: alluvial clays, marine clays, estuarine clays, lacustrine clays, stiff clays, highly fissured clays, boulder clays, organic clays and peats, silts, sands and other cohesionless soils, loess, volcanic soils, residual and other tropical soils, weak rocks, methane hydrate soils, and recent sediments. The workshop organizers emphasized that the pursuit of perfection and comprehension was highly stressed throughout the process of preparation and review of all papers to ensure that high technical and professional quality works are produced.

All papers presented in the workshop are on invitation basis only. Most of the papers presented in the workshop are prepared by university professors, MAA is one of the four non-academic institutes requested to prepare a paper on soils of international significance. It is a great honor to MAA that our long-term effort in studying the characteristics of the soil deposits in Taipei has been recognized by the international geotechnical society.

The paper is prepared with an aim to bring a complete overview of the state knowledge about the engineering properties of Taipei Clay. Hence, the paper would benefit researchers and practitioners with hand-on information, should they have to deal with soil materials in Taipei.

It is anticipated that the understanding and application of engineering properties of Taipei Clay will continue to advance along with the development of the City. Finally, it is expected that the publication of this booklet would come in time to provide a benchmark reference for future characterization works on soils in this region.

It is anticipated that the understanding and application of engineering properties of Taipei Clay will continue to advance along with the development of the City. Finally, it is expected that the publication of this booklet would come in time to provide a benchmark reference for future characterization works on soils in this region.

ENGINEERING RISK MANAGEMENT – APRIL 2007

With the ever increasing challenge of construction in modern economy, enhancement of engineering quality and safety has been highly addressed. In order to meet safety, quality, and even economic requirements in today's complex world, the development and use of more advanced engineering technology is essential. Risk management, the identification of potential engineering problems, is one such method to decrease engineering risks.

Specifically, risk management is an organized approach to manage uncertainties through a series of actions, including risk identification, risk assessment, risk evaluation, and risk treatment. It has been extensively applied to government policy, organization administration, finance, insurance, and etc. However, it is still a rising area in the engineering industry. Application of risk management in international engineering practice is often on the subjects of slope stability, large hydraulic (e.g., dam safety) and tunneling engineering. However, accidents often take place for underground or tunneling engineering construction of rapid transit systems, largely due to complicated geological conditions and the lack of systematic management. As a result, risk management is an increasing need for the engineering of underground structures.

Currently, many relevant international engineering societies and associations are giving particular attention to the establishment of criteria for engineering risk evaluation and management. However, a well-developed risk management in engineering field depends on many factors, including the involvement and promotion of professional engineering entities, innovative research from academic institutions, and close coordination among both engineering and non-engineering entities. Moreover, to make the application of risk management more practical, appropriate modification of fundamental theories in accordance to actual engineering characteristics will be needed.

Since the establishment in 1975, MAA Group Consulting Engineers (MAA) has kept introducing pioneering concepts and technology to the domestic engineering societies. Perceiving risk management as a subject worthy of endeavor, MAA has devoted resources to research and promote risk management application to engineering practices, mainly through the integration of past experiences and technology learned from mega-projects. The lessons learned and the current MAA practices in risk management application are collected in this book. MAA dedicates this book to the engineering profession, academic institutions and all related professions in the promotion of practical application of risk management in the engineering industry.

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MAA AWARDS

► AWARDS

ENGLISH NAME	CHINESE NAME	DEPARTMENT	POSITION	AWARD TYPE
Pei-Yu Huang	黃培宇	Taichong MRT Project	Senior Civil Engineer II	staff-of-the-year award
Yun-Hui Lai	賴昀暉	Geotechnical Eng. Dept.	Geotechnical Engineer I	staff-of-the-year award
Yung-Chien Hsu	許永健	Kaohsiung Office	Civil Engineer I	staff-of-the-year award
Song-Tsang Lin	林松蒼	Civil & Water Resources Eng. Dept.	Senior Civil Engineer II	Merit Award
Jiun-Nan Chen	陳俊男	Civil & Water Resources Eng. Dept.	Civil Engineer III	Merit Award
Ping-Ching Tang	唐炳清	Construction Supervision Dept	Civil Engineer I	Merit Award

Chong-Ming Sun	孫仲民	Construction Supervision Dept	Civil Engineer II	Merit Award
Yi-Ming Song	宋益明	Geomatics Dept.	Senior Geotechnical Engineer II	Merit Award
Chuan-Hsin Chin	金全鑫	Geomatics Dept.	Computer Engineer I	Merit Award
Hui-Ju Sung	宋蕙茹	Geomatics Dept.	Computer Engineer III	
Jin-Ling Shsu	許金凌	Geomatics Dept.	Computer Engineer III	
Gwo-Jenn Liu	劉國鎮	Project & Construction Management Dept.	Senior Geotechnical Engineer II	Merit Award
Yu-Chi Lin	林育祺	Project & Construction Management Dept.	Structural Engineer II	Merit Award
Chang-Lung Yang	楊昌隆	Project & Construction Management Dept.	Electric-Mechanical System Engineer I	Merit Award
Mi-Ju Chen	陳美如	Project & Construction Management Dept.	Civil Engineer I	Merit Award
Kuo-Shang Tseng	曾國祥	Construction Supervision Dept.	Civil Engineer I	Merit Award
An-Tai Chang	張安泰	Taichong MRT Project	Structural Engineer I	Merit Award
Chia-Feng Lu	呂嘉峰	Taichong MRT Project	Structural Engineer I	Merit Award
Chung-Ming Wang	王俊銘	Structural Eng. Dept.	Structural Engineer II	Merit Award
Meng-Han Chuang	莊孟翰	Geotechnical Eng. Dept.	Geotechnical Engineer I	Merit Award
Wen-Chang Shih	施文章	Transportation Eng. Dept.	Civil Engineer I	Merit Award
Chien-Hong Wang	王劍虹	Geotechnical Eng. Dept.	Principal Engineer	Merit Award
Hsiao-Chou Chao	趙曉周	Geotechnical Eng. Dept.	Geotechnical Engineer I	Merit Award
Yung-Feng Lai	賴永豐	Geotechnical Eng. Dept.	Geotechnical Engineer I	Merit Award
Jie-Ru Chen	陳皆儒	Geotechnical Eng. Dept.	Geotechnical Engineer I	Merit Award
Jeng-Long Lee	李振隆	Electric & Mechanical System Eng. Dept.	Senior Electric-Mechanical System Engineer II	Merit Award
Hua-Yu Chiu	邱華玉	Electric & Mechanical System Eng. Dept.	Traffic Engineer II	Merit Award
Ching-Yu Chien	簡清鈺	Electric & Mechanical System Eng. Dept.	Electrical Engineer I	Merit Award

PERSONNEL PROFILES



Mr. Shaw-Wei Duann (段紹緯)

Mr. Shaw-Wei Duann was appointed to lead the newly established AGILETECH Engineering Consultants Co. Ltd. (AECC) as Technical Vice President in July 2007. Mr. Duann received his bachelors in civil engineering from Chung Yuan Christian University in 1977, masters in civil engineering from National Cheng Kung University in 1981 and masters in geotechnical engineering from University of Massachusetts at Amherst in 1986. Mr. Duann joined MAA Taiwan shortly after his graduation in 1986. Since then, Mr. Duann has participated and led many major projects including North Second Freeway, Geotechnical Characteristics of the Taipei Basin Deposits, power plants, Geotechnical Engineering Specialty Consultancy of Taipei MRT, Taiwan High Speed Rail, and several sections of Taipei MRT and Kaoshiung MRT. Mr. Duann has also undertaken many deep excavation projects and successfully trouble-shooted many geotechnical problems. To date, he has published 27 technical papers. He is a member of Chinese Institute of Civil and Hydraulic Engineering, Chinese Institute of Geotechnical Engineer, Southeast Asian Geotechnical Society.



Mr. Win-Bin Hsu (許文斌)

Mr. Win-Bin Hsu was promoted in August 2007 to Manager of the new Construction Supervision Department in MAA Taiwan. Mr. Hsu obtained his B.S.C.E. degree from National Central University in 1975. Mr. Hsu worked for RSEA in 1978 and was recommended to study the geotechnical engineering in Asian Technology Institute, where he obtained his masters degree in 1984. Mr. Hsu has professional experiences of construction and design on the public engineering projects undertaken at R.S.E.A. for past 17 years. Major works include construction management, construction planning, cost evaluation and control, engineering buying and contract of construction, control of construction progression and quality. Mr. Hsu joined MAA in 1998 and was responsible for the following projects: Technical Consultant of Dazui intersection on No.2 Taiwan Freeway project, Taiwan central second Freeway project from Dajia to Changben, Taiwan High Speed Rail Contract C220, Taipei International Financial Center project, Core Pacific Mall project, Taipei Metropolitan Area Rapid Transit Systems No.173 project, all phase for C398 and C347 project of South Secondary Freeway, etc. He is a member of Chinese Institute of Engineers, Chinese Institute of Civil & Hydraulic Engineering and Chinese Institute of Construction & Management. To date, he has published/co-published 7 technical papers.



Mr. Huat-Yoo Chua (蔡發耀)

Mr. Huat-Yoo Chua was promoted to Project Manager of Taichung MRT Project in August 2007. Mr. Chua received his bachelor's degree in civil engineering from National Taiwan University and received the master degree of structural engineering from Asian Institute of Technology. He is also a candidate in the Business Executive Program and CMBA program of National Cheng-chih University in 2000 and 2001. Prior to joining MAA, Mr. Chua worked at Min Consult Sdn. Bhd. Malaysia as civil engineer and was involved in Sandakan Airport Development Project and Butterworth / Bukit Mertajam Metropolitan Sewerage Project. After joining MAA in 1981, he has gained extensive experience in the planning, detailed design and construction supervision of highway bridges, roadworks, foundations, underground water tank, basement structures, highrise building and MRT systems. Mr. Chua was also fully responsible in the inspection & structural appraisal of several existing buildings and bridges in Taiwan. Major experiences include Shang Chung Water Distribution Tank, Taipei; design and supervision of Flyover Across Braddell Road at the Junctions of Braddell Road and Lorong Chuan, Singapore; design and supervisions of Central Expressway from AMK Ave. 1 to Ave.5, Singapore; design of temporary works for construction in MRT contract 405, Singapore; design of Foundations for Rochor complex at Rochor Road, Singapore, a 17-storey low cost Housing Development at Paya Terubong, Penang; Condominium Housing Comprising 4 to 20 storey buildings at Bedok Ave. 3, Singapore; design of basement and piled foundation for a 15 1/2 storey office complex at Jalan Klang, Malaysia, etc. Additionally, Mr. Chua is Chartered Engineer and Chartered Structural Engineer of United Kingdom and he is also Professional Engineer of Malaysia.



Dr. Tzu-Jeng Su (蘇子正)

Dr. Tzu-Jeng Su was promoted to Project Manager of Taoyuan International Airport Project in January 2008. Dr. Su received his bachelor's degree in Civil Engineering and masters degree in structural engineering from National Taiwan University in 1979 and 1984 respectively. He later received his Ph.D. in Aerospace engineering from University of Texas at Austin in 1989. Dr. Su is a registered professional civil engineer in Taiwan and has recently obtained the certificate in Project Management Professional from Project Management Institute, USA. He is also a member of Project Management Institute USA, Taiwan Professional Civil Engineers Association, American Institute of Aeronautics and Astronautics, and Society of Experimental Mechanics USA. Prior to joining MAA in 1994, Dr. Su has taught at the Department of Aerospace Engineering and Engineering Mechanics of University of Texas at Austin in 1990, and has worked as research associate in NASA Langley Research Center from 1991 to 1993. Dr. Su has a professional career encompassing research, academia and industry. In his early era as a researcher, Dr. Su has dedicated a keen research interest in area of structural dynamics, system identification and controls. His research achievement is manifested by numerous well-received articles published in technical journals and conference proceedings. Dr. Su also is an experienced professional civil engineer. His extensive experience is highlighted by a number of large, complex infrastructure projects he has managed – metros, airport, harbor, and high-speed rails. Dr. Su is a veteran project manager, a PMP, with strong management skills in project planning, scheduling, quality proving, problem-solving, coordination and team/staff leadership. His substantial experiences gained recognition by Who's Who in Science and Engineering as well as Who's Who in America.



Mr. Hsi-Fu Pan (潘錫富)

Mr. Hsi-Fu Pan was transferred to the Project Manager position of N-WH Project in August 2007. Mr. Pan received his bachelor's degree in Civil Engineering from Chung Yuan University and got his M.S.C.E. from National Central University in 1982. Mr. Pan worked at Taiwan Highway Bureau from 1985 to 1993 and was involved in survey & superintendence of bridge construction and check & review of roads, bridges and tunnels. Mr. Pan joined Taiwan Housing and Urban Development Bureau from 1993 to 1994 during which his major works were to check and review city streets. Mr. Pan joined MAA in 1994 as structural engineer and was involved in High Speed Rail Project C280, Kaohsiung Rapid Transit project, Taipei Metropolitan Area Rapid Transit System and Taichung Metropolitan Area MRT Project phase 1 etc. Mr. Pan is a registered Professional Engineer (Civil, Structural) and he is also member of Chinese Institute of Engineers and Chinese Society of Structural Engineering.



Ms. Chou Zhou Mei (周兆玫)

Ms. Chou Zhou-Mei was promoted to Director of Accounting in July 2007. After graduating from the Department of Accounting in Shih-Chien College of Home Economics, Ms. Chou worked at Wei Yi Trade Co. in 1986 as general accountant. Ms. Chou later joined MAA in 1988. Since joining MAA, she has often devoted time to develop the computerization of MAA Taiwan's financial and accounting operation. The upgrading of the financial and accounting system allowed for immediate up-to-date information on salary, project accounts and manpower analysis, which are often needed by project engineers and company management. Ms. Chou was also involved in the organizational adjustment of the Financial and Accounting Department in order to achieve better internal control and financial inspection. Her rapid responses to company needs and clear suggestions have often helped the company acquire capital at the lowest cost and usage of capital at the highest efficiency.



Mr. Kuei-jung Lin (林貴榮)

Mr, Kuei-Jung Lin joined MAA in September 2003 as Senior Engineer II in charge of National Defense University Construction Project Management. Mr. Lin graduated from Department of Civil Engineering at the Chung Cheng Institute of Technology in 1970. He was then assigned at Air force Headquarters and Department of Engineering, Combined Services, in which he was involved in building of the runway and the taxiway in the Zhihang Air Base in Taidong. After that, Mr. Lin worked at Chonghe Construction Co., Ltd, from 1981 to 1987. Between 1988 and 1991, he joined Dengchun Construction Co., Ltd. as Construction Manager. In 1992, he joined China Rebar Co., Ltd. and involved in rebuilding the barracks at Sungshan Air Command, the construction of twin hangars in Pingdong, the Taichung Provincial Museum of Fine Arts, Dunan, Guoding, Lijing, Broadway, Elegant Feast and Nanking Phase 2 projects. Hence, he has obtained rich experience of, bidding, contracting and construction management. In 1996 Mr. Lin was assigned to the Rebar London, a project of 12 18-storys-on-ground-and-3-underground SRC buildings in Badeh, Taoyuan County for a total cost of NT\$3,600,000,000



Mr. Kwai-Cheung Hui (許季翔)

Mr. Kwai-Chueng Hui was promoted to Senior Environmental Engineer II in July 2007. He received his bachelors degree in environmental engineering from National Cheng Kung University in 1988. Mr. Hui worked at Mei-Tai Co., Ltd prior to joining MAA in 1989. During his years in MAA, he carried out various types of projects ranging from design & construction supervision of sewage systems to design of trash collection sites, environmental monitoring services for highways, and planning, design and construction supervision of treatments of abandoned construction materials. He has also been involved in BOT projects for sewerage systems in Taiwan. Mr. Hui is a certified Quality Management Engineer, Labor Safety and Hygiene Management Engineer, and Sewerage Operation & Maintenance Supervisor. Furthermore Mr. Hui is a qualified operator for wastewater treatment plants.



Mr. Hsu-Cheng Wu (吳旭朕)

Mr. Hsu-Cheng Wu was promoted to Senior Structural Engineer II in July 2007. In 1986, Mr. Wu got his bachelors and master degree of Hydraulic & Oceanic Engineering from National Cheng Kung University. Prior to joining MAA, he worked at Fu-Tai Engineering Co. Ltd. as Assistant Structural Engineer from 1988 to 1992. Between 1992 and 1993, he was in Hong-Ding Civil Engineering Co. Ltd. as Civil Engineer. He was involved in several major projects on the planning of fossil-chemical plant, steel plant and power generating plant, and worked for the structural analysis and design of the substructure, superstructure and office building of the plants. Mr. Wu is a Registered Profession Engineer (Civil Engineering) and joined MAA as structural engineer in June 1993, after which he has gained experiences in High Speed Rail, Chung-Tou Highway and Taichung MRT projects.



Mr. Szu-Ming Kang (康思敏)

Mr. Szu-Ming Kang was promoted to Senior Structural Engineer II in July 2007. Mr. Kang received his bachelors and master degree of structural engineering from National Cheng Kung University. Mr. Kang joined MAA in 1994 as structural engineer and has been involved in many projects such as Kaohsiung MRT 1OFD09A; viaduct structures for High Speed Rail Project Tainan-Kaohsiung Section, Keelung Harbor West Coast Viaduct, steel bridges design for Taiwan High Speed Railway Contract C296 and steel viaduct structures for Taipei MRT Nei-Hu Line. From October 2002, Mr. Kang had been assigned to be in charge of the structural design works for Kaohsiung Mass Rapid Transit Project, Orange Line CO2 Section and Red Line CR6 Section Civil Contract, and for Taipei Mass Rapid Transit Project SongShan Line DG166 Section since 2003. From January 2007 Mr. Kang is assigned to be the Design Verification group leader for N-WH project. In addition, Mr. Kang is a Certified Quality Engineer and Associate Value Specialist to Value Management Institute of Taiwan. To date, he has published/co-published 8 technical papers.



Mr. Chi-Yu Liu (劉濟宇)

Mr. Chi-Yu Liu was promoted to Senior Mechanical & Electrical Engineer in July 2007. Soon after his graduation in Mechanical Engineering field from Tung Nan Junior College of Technology in 1987, Mr. Liu joined Liu & Associates Architect Office as Electrical and Mechanical Engineer and was responsible for the electrical, plumbing and air conditioning system programming and installation in the New Land Group Office Building, Nan-Kan Residence Project, Shu-Lin Residence Project. From 1996 to 1999 he transferred to Chung Yao-Shan Architect Office and has been involved in many projects such as the Affiliated Senior High School of The National Kaohsiung Normal University Educational Building, The Tamkang Senior High School Educational Building, Tainan Residence Project of The Taiwan Sugar Corporation and Taiwan Provincial Chiayi Hospital. From 1999 to date, Mr. Liu worked for Moh & Associates Inc. and was responsible for the electrical-mechanical system design and project management as well as in charge of project management for Keelung Port Management Center. Mr. Liu is also the Utility Quality Engineer to the Executive Yuan.

OBITUARY

MR. GU RUIJUN, PAST PRESIDENT OF MAA SHANGHAI

On 16th August 2007, Mr. Gu Rui-Jun, former President of MAA Shanghai, passed away peacefully in his hometown, Shanghai. Mr. Gu graduated from Mechanical Department of Shanghai Machinery College in 1954 and received diploma from Civil Department of Shanghai Tong-Chi University in 1958. He had worked for Shanghai Pharmaceutical Industry Design Institute (SPIDI) in design, engineering and administration for nearly 43 years before he retired in 1996. Mr. Gu started his career as a technician, and was gradually promoted to engineer, senior engineer, section chief, group leader, deputy director and lastly director of branch office. His long-term service has significantly contributed to the success of SPIDI in the pharmaceutical and related fields.

MAA Shanghai, was established as a joint-venture between MAA and SPIDI. During the JV period, Mr. Gu was at first one of the board member representative of SPIDI, and upon his retirement from SPIDI in 1996, Mr. Gu was appointed as President of MAA Shanghai. His tenure lasted until his passing away. For over 10 years service with MAA Shanghai, Mr. Gu

has developed the company into a full-disciplinary professional team focused in the pharmaceutical and chemical sectors. He has successfully steered the company forward by carrying out more than 700 projects, and establishing quality management, environmental management and OHS management systems, which altogether enhanced the strength and credential of the company. Mr. Gu was also very active in professional and public affairs. He was the Director of China Pharmaceutical Business Management Association, the Director of Friendship Club of Shanghai Entrepreneur Association, the founding member of Shanghai Engineering Consulting Trade Association and the Representative of People's Congress of Jin-An District of Shanghai.

MAA Group sends her greatest condolences to his family and will remember his contributions in developing MAA Shanghai into one of the leading private engineering consulting firms in the pharmaceutical and chemical sectors in China.



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