NAME MAURO BALDUCCINI
BORN / NATIONALITY/ FAMILY: Rome, 21/March/1953 / Italian/ married, 2 sons: Matteo (1980) and Livia (1982); 2 grand-daughters: Ginevra (2014) and Sofia (2017)
EDUCATION: 1977: Degree in Nuclear Engineering at the Rome University 110/110; registration to the "Ordine degli Ingegneri" (Milan, then Rome)

PROFESSIONAL EXPERIENCE:
Since May 2015- Administrator of MaBa Consulting SRL (Roma); see www.mabaconsulting.it: in particular:

2025:
Assignment of the Luigi Broglio prize 2025
Successfull completion of the SIMONA (Sistema Italiano di Messa in Orbita tramite NAve, 1+2+3 phases) PNRM Program
Successful completion of the phase 1 of the PNRM MIUS (Motore Ibrido Ultimo Stadio) program and development of the proposal for the phases 2+3
Development of the technical and economic proposal for the PNS program SUBSATCOM (Polo Nazionale dimensione Subacquea, direct communication between submerged vehicle and satellite in LEO)
Development of the technical and economic proposal for the PNRM program named DEVO (Dispositivo per Estensione Vita Operativa)
Development of the activity planning, and of the implementation organization, for a Research on Super-Cavitation

2024:
Development of the proposal PNRM 2025 for the program SICURO (Sistema Italiano di Comunicazione Underwater con Ricevitore Ottico) and with principal participant constituted by Scuola di Ingegneria Aerospaziale di Roma (Sapienza)
Acquisition of support contract from QASCOM (IT) for the participation to the ASI announcement SR734376.: "Procedura esperita ai sensi di quanto previsto dall'art dall'art.135 comma 1 lettera a) e nel rispetto dei principi di cui agli artt. 1, 2 e 3 del D. Lgs. n. 36/2023, nonché ai sensi dell'art. 55 del vigente Regolamento di Contabilità e Finanza dell'ASI per l'affidamento dei servizi per progetti di ricerca e sviluppo a tematiche disciplinari relativi a "Sistemi di navigazione per il trasporto autonomo e automatico" (Research and developent activities for authonomous and automatic navigation and transport systems.

2022 and 2023:
Acquisition of Consultancy contract from a not European Organization and relevant to Ramjet Propulsion in the frame of cooperation basic research with Italian public research Centers
Acquisition of the PNRM 21 program named MIUS (Motore Italiano per Upper Stage)
Development of Proposal for Bando ASI FEB 23 named: Procedura negoziata ai sensi di quanto previsto dall'art. 158 e 4 del D. Lgs. 50/2016 (Codice dei Contratti) e dall'art. 55 del vigente Regolamento di Contabilità e Finanza dell'ASI per "research and development concepts for space systems"
Acquisition of PNRM 2020 Contract SIMONA for the phase 3/3 and with principal participant constituted by Scuola di Ingegneria Aerospaziale di Roma (Sapienza)
Acquisition of consultancy contract from a not European Organization for developing a follow-up activity of their Italian contractor (public research organization) relevant to base research in the area of airbreating propulsion

2021:
Acquisition of Italian Defence Contract PNRM 2020 named SIMONA (Sistema Italiano di Messa in Orbita da NAve) for the execution of the phases 1 and 2 and with principal participant constituted by Scuola di Ingegneria Aerospaziale di Roma (Sapienza)
Development of consultancy on Launcher Upper Stages toward a national Organization operating on satellite services.

2020:
Development and conduction of the "First Workshop on Space" for the Italian Navy (October – November 2020)
Appointment by Italian Consiglio Superiore dei Lavori Pubblici for the participation to the Working Group on technology innovation in the area of infrastructures of present and future interest of the Italian Consiglio Superiore dei Lavori Pubblici.
Author of the Proposal named SIMONA (Sistema Italiano di Messa in Orbita da Nave: Access to orbital Space System based on a Naval Platform). Proposal selected for implementation in the frame of the National Military Research Program (PNRM)

2019:
Assignment of the Research named: ""Ruolo della Difesa nel contesto delle costellazioni di nano-satelliti: nuovi scenari offerti dal lancio assistito da velivoli in alta quota e da piattaforma navale." In the frame of the CEMISS Research program 2019; AO-SMA-03 e AO-SMM-06
Participation to the Commission to evaluate the Candidates for the role of member of the Technical-Scientific Committee (CTS) of the Italian Space Agency (ASI)
Support activities to CNR, CIRA and Aeronautica Militare Italiana for the activities carried out for the development of Air-launch feasibility based on the utilization of a Eurofighter platform; a program of the Stato Maggiore Aeronautica (SMA)
Participation to the activities of the Technical- Administrative Committee (CTA) in the frame of the agreement between the Italian Defense (MD) and the Italian Transport and Infrastructures (MIT) ministries
Participation to the Commercial Sub-orbital Transportation Task Force (CSTTF) managed by ENAC under the mandate of The Italian Ministry of Transportation and infrastructures (MIT)

2018:
Development and activation of the workshop titled: "ACCESSO E SFRUTTAMENTO DELL'ORBITA BASSA TERRESTRE / Strategie tecnologiche e commerciali per l'Italia basate sulla disponibilità nell'area Piccoli Lanciatori". Workshop held under the cooperation of the Ordine Degli Ingegneri di Roma (Aerospace Commission)
Development of an analysis aimed to obtain the national flight authorization for sub-orbital missions (based on a critical review of USA-FAA agreement and on general criteria developed by European organization EASA).
Feasibility preliminary analysis and business plan considerations for the development of a national launch system based on the utilization of a (manned) .Naval Platform
Development of technical- economic support to NHOE for the issue of a proposal to ESA/EDA named "Earth Observation requirements Feasibility Study: the METEOR"
Development of a consultancy support to Scuola di Ingegneria Aerospaziale of Rome La Sapienza for the issue of a proposal nemed: ASTEROID: Attracting Students Through Education, Research, Outreach, Innovation, Dissemination, in the frame of H2020 CSA Outreach and Education

Consultancy support to NHOE for the issue of a proposal in the frame of ESA/ARTES Very Small Geostationary Spacecraft for Telecommunication Services, ARTES Future Preparations 1B.121

2017:
Contract from the Scuola di Ingegneria Aerospaziale of Rome La Sapienza for a technical – Economic preliminary analysis of an orbital launch system based on an aeronautic platform.

2016:
Conception, technical, organizative and economic characterization, and presentation to the Italian Space Agency (prof. Battiston) of an Organization named "Nucleo di Competenza Lanciatori", aimed to secure the control of know-how developed by Italy in the frame of the Launch Systems

2015:
Development of feasibility analysis and implementation of contractual proposal for a Test Bench for the ground testing of Ramjet Engine
Development of consultancy for re-entry analysis of Satellites (to comply with ESA Debris Control Regulations)
Provision of consultancy support for the development of Modules / Subsystem aimed to support the compliance with Debris Control international Legislation / Guidelines (IADC)
Consultancy on Launch System development options and analysis of economic attractiveness for a European Country relevant to the definition of recommendations in the frame of the preparation of EU Ministerial Conference for Space.
Development of training courses for specific needs of SME and for University (Cost analysis and Management, Program Management, Launch Systems, professional competitive proposal development, development of Video promo for marketing / commercial target, issue of Business Plans)

2008 - April 2015 AVIO (Colleferro – Roma):
Head of Avio Research & Development for Space Programs; development of proposals and strategic plans for the Research activities (EU, ESA, EDA, MIUR, Italian Defence, Italian Regional Organisations). New system concepts development in the frame of Debris Control Systems (END, END/MMOD, CAOS, RBB…), Orbit Transfer and Deorbiting Modules, Air-Launched Orbital vehicles, low cost small Launch Systems, Gun Launch To Orbit concepts, Air-breathing first stage for Launch Systems (flight models and ground test benches), Vehicles and LV Upper stage improvements for allowing In Orbit Testing.
Development, and preliminary discussion with ESA of possibilities of characterising the "demiseability" of different materials, equipment and assemblies by using testing carried out during the recurring re-entry of each Vega Launcher mission (critical input parameter for carrying out the debris/ safety control analysis relevant to Satellite/ Upper stages)
Development of Spin-off plan for advanced technologies toward "not-space" business areas.

2001- 2008 ELV (Colleferro – Rome):
Consolidation in Launch Systems development with the management (as Vega General Manager) of the ELV team under contract with ESA for the Vega launcher development, qualification and 1st flight up to the System Design Review.
Responsibility for the upper level Launch Vehicle interfaces with the Launch Base and the P80 Programs.
System requirement authority for the Vega Hardware in the Loop test model.
Responsible for the development of Risk Analyses and for the definition of the New Initiatives.

Development of Vega Upper Stage introducing debris control limitation (in particular adopting a "demise design in order to comply with a uncontrolled re-entry transient) and enabling its utilisation for In Orbit Testing after the separation of the Primary PL
Starting of lectures and courses for Universities and international Organisations (topics: System Management; Cost Analysis, Propulsion, Debris regulations and control).

1993 - 2001 FIAT AVIO/BPD (Colleferro -Rome)
Development of System design and management capabilities for Launch Systems (Cyclone 4 development; and VEGA technical manager); "design" recruitment and control of the System Teams. Development and review with FIAT Corporate top management, of the Industrial Business Plan for the VEGA development contract.

1990 - 1993 SELENIA SPAZIO (ALENIA SPAZIO) Rome
Expansion of System level competence with the responsibility of the ITALSAT 2 Communication S/C and of SICRAL1 Military Satellite Platform; responsible for the In-flight anomalies processing.

1982 - 1989 BPD (Colleferro - Rome)
Technical heritage development for Space Propulsion and (manned) System Engineering (tech responsibility for the Nutation Control System of the IRIS stage flown on STS and several other Propulsion Systems)).

1977 - 1982 BREDA TERMOMECCANICA (ANSALDO GROUP), Milan
Technical background development as Thermo-Structural Analyst within Nuclear and Petrol Chemical area.

KEY ACTIVITIES:
2025: Assignment of the Luigi Broglio prize 2025
2019: General Advisor of the Italian Navy on Launch Systems and access to space
2018: General Advisor of the Italian Ministry of Transportation and Infrastructures for Access to Space subject
2014 Experience on Patents request documentation
2013 Responsible for the "piano di formazione" per attività programmatiche, di progettazione e di prova su strutture in materiale composito" issued for Regione Lazio
2011 Rapporteur for the DA4 (Sistemi di Trasporto Spaziale, Lancio e Rientro) of the Italian Research Platform SPIN-IT
2008 Member of Eurospace Technical Advisory Board
2004 Starting of lectures and courses for Universities and international Organisations Università di Roma La Sapienza; Scuola di Ingegneria Aerospaziale, SIOI, CIRA (topics: System Management; Cost Analysis, Propulsion, Debris Control constraints)
2003 Experience on the development of Proposal based on ECOS (ESA software)
2002 Chairman of the Ariane 2010 Key Point N.2 for CNES/DLA, with the objective to investigate and validate potential evolutions of the Ariane 5 launch system in order to preserve its competitiveness in the long term, mainly through cost reductions
1996: Participation to the Technical Support Team constituted by ESA/AEROSPATIALE for investigating the Failure of Ariane 5 flight 501. Special focus on A5 Software management development and verification.
1992: Participation to training on Team Building and Management