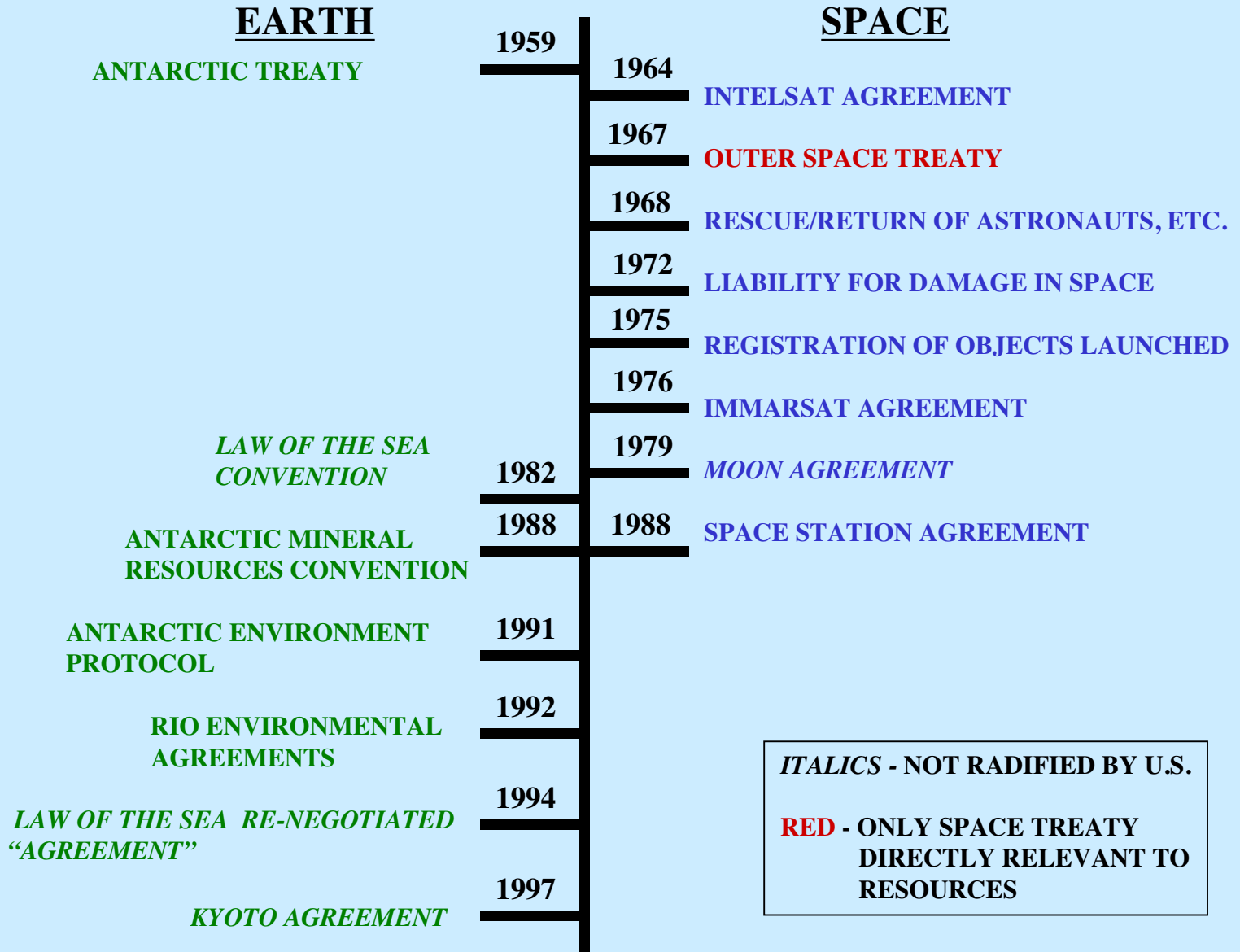


# CHRONOLOGY OF INTERNATIONAL AGREEMENTS RELEVANT TO SPACE



# THE MOON AGREEMENT - 1979

## GENERAL\*

- ENTERED INTO FORCE IN 1984 - NINE COUNTRIES HAVE RATIFIED
  - MAJOR SPACE POWERS HAVE NOT RATIFIED, INCLUDING U.S., RUSSIA, CHINA, JAPAN, AND FRANCE - THUS, AGREEMENT REMAINS MOOT
- REPEATS THE OBLIGATIONS CONTAINED IN THE OUTER SPACE TREATY
- NEW OBLIGATIONS/RIGHTS INCLUDE:
  - SAMPLES COULD BE REMOVE AND RETAINED
  - RESOURCES MAY BE USED TO SUPPORT ACTIVITIES ON THE MOON
  - PREVENTION OF THE DISRUPTION OF THE EXISTING ENVIRONMENTAL BALANCE
  - FREE ACCESS OF OTHER PARTIES CANNOT BE IMPEDED
  - THE STATEMENT "THE MOON AND ITS NATURAL RESOURCES ARE THE COMMON HERITAGE OF MANKIND.."
- ARTICLE 11 COMMITS TO UNDERTAKE TO ESTABLISH AN INTERNATIONAL REGIME TO GOVERN THE EXPLOITATION OF LUNAR RESOURCES "AS SUCH EXPLOITATION IS ABOUT TO BECOME FEASIBLE"
  - ORDERLY AND SAFE DEVELOPMENT
  - RATIONAL MANAGEMENT
  - EXPANSION OF USE
  - EQUITABLE (NOT DEFINED) SHARING OF THE BENEFITS
- INFORM THE PUBLIC OF ANY NATURAL RESOURCES DISCOVERED

# **THE MOON AGREEMENT - 1979**

## **PROBLEMS -1**

- **U.S. DID NOT SIGN OR RATIFY ALTHOUGH HELPED TO DRAFT IN UN COMMITTEE**
  - **SENATE CONCERNS ABOUT THE INTERPRETATION OF THE "COMMON HERITAGE" LANGUAGE IN LIGHT OF THE HISTORY OF THE LAW OF THE SEA CONVENTION**
- **ONE VIEW IS THAT THE PHRASE CONTEMPLATES A MORATORIUM ON USE OF LUNAR RESOURCES**
- **OTHER VIEW IS THAT THE PHRASE HAS NEVER HAD A FIXED MEANING**
  - **NEGOTIATING HISTORY OF THE MOON AGREEMENT SUPPORTS THIS VIEW**
  - **EXTENT OF AGREEMENT ON "COMMON HERITAGE" PHRASE AS IT MIGHT RELATE TO LUNAR RESOURCES**
    - **MINING AREAS NOT SUBJECT TO NATIONAL APPROPRIATION**
    - **SHARED MANAGEMENT RESPONSIBILITY**
    - **SHARING OF ECONOMIC BENEFITS**
    - **USE FOR PEACEFUL PURPOSES**
    - **FREE AND OPEN SCIENTIFIC RESEARCH**
    - **CONCERN FOR PROTECTION FROM ENVIRONMENTAL HARM**
  - **LAW OF THE SEA HISTORY, HOWEVER, ATTEMPTS TO CREATE A DEFINITION THAT, IF USED AS A PRECEDENT, MIGHT PRECLUDE NON-INTERNATIONAL INVESTMENT IN SPACE RESOURCES**


# THE MOON AGREEMENT - 1979

## PROBLEMS -2

- **NO MANAGEMENT REGIME ESTABLISHED**
  - **ARTICLE 11 EXPRESSLY CONTEMPLATES A SEPARATE NEGOTIATION WITHOUT PRECONDITIONS OTHER THAN THOSE ALREADY ACCEPTED FOR OUTER SPACE ACTIVITIES**
  - **ANY DISAGREEING STATE WILL NOT BE LEGALLY BOUND BY WHATEVER MANAGEMENT REGIME IS DEFINED BY THIS NEGOTIATION**
  - **ARTICLE 11, HOWEVER, CREATES GREAT UNCERTAINTY AND WOULD PREVENT RAISING CAPITAL OR GAINING CONGRESSIONAL SUPPORT FOR A LUNAR RESOURCE INITIATIVE**
- **IT DOES NOT APPEAR THAT THE TREATY'S USE OF THE PHRASE "RESOURCES MAY BE USED TO SUPPORT ACTIVITIES ON THE MOON" WAS INTENDED TO PRECLUDE BROADER USE OF SUCH RESOURCES BUT IT IS NOT CERTAIN HOW OTHERS WOULD ATTEMPT TO INTERPRET IT.**
- **DETAILED ENVIRONMENTAL OBLIGATIONS LEFT OPEN**
- **NO SCHEDULED CONSULTATIONS HELD IN 1994 OR SINCE DUE TO LACK OF INTEREST IN RETURNING TO THE MOON.**

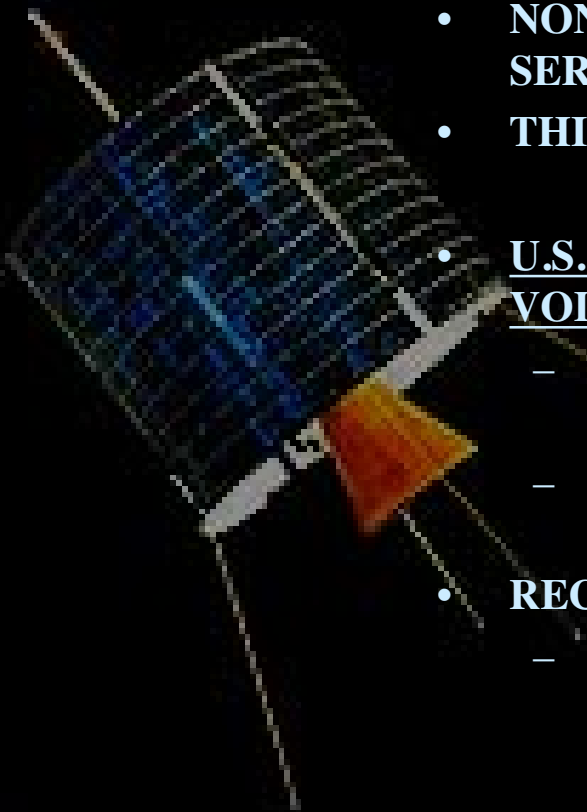
# THE MOON AGREEMENT - 1979

## PROBLEMS -3

- 
- A black and white photograph of an astronaut on the moon, wearing a full space suit and helmet, standing on the lunar surface. The background shows the dark, cratered landscape of the moon under a black sky.
- **EXPANSION OF PROHIBITION ON CLAIMING SOVERIGNTY TO INCLUDE “BY MEANS OF USE OR OCCUPATION, OR BY ANY OTHER MEANS”**
  - **STRONG PROHIBITION ON OWNERSHIP OF "NATURAL RESOURCES IN PLACE...SURFACE OR THE SUBSURFACE OF THE MOON..." IN COMBINATION WITH PROHIBITION OF NON-INTERNATIONAL "EXPLOITATION OF NATURAL RESOURCES".**
  - **WHAT WOULD BE THE QUANTITATIVE MEANING OF "AN EQUITABLE SHARING OF ALL STATES PARTIES IN THE BENEFITS DERIVED FROM [THE NATURAL] RESOURCES [OF THE MOON]..."**
  - **MANDATES FOR (1) AN INTERNATIONAL MANAGEMENT REGIME, (2) ONE NATION-ONE VOTE RULE, AND (3) A “REVIEW CONFERENCE” WOULD CREATE A DE FACTO MORATORIUM ON PRIVATE SECTOR ACTIVITIES**
  - **STATUS:**
    - **NO CONSULTATIONS HELD IN 1994 OR SINCE AS SCHEDULED DUE TO LACK OF INTEREST IN RETURNING TO THE MOON.**
    - **U.S. SHOULD UNEQUIVOCALLY “WALK AWAY” THAT THIS AGREEMENT IS DEAD TO REMOVE ANY RESIDUAL UNCERTAINTY THAT MAY EXIST**

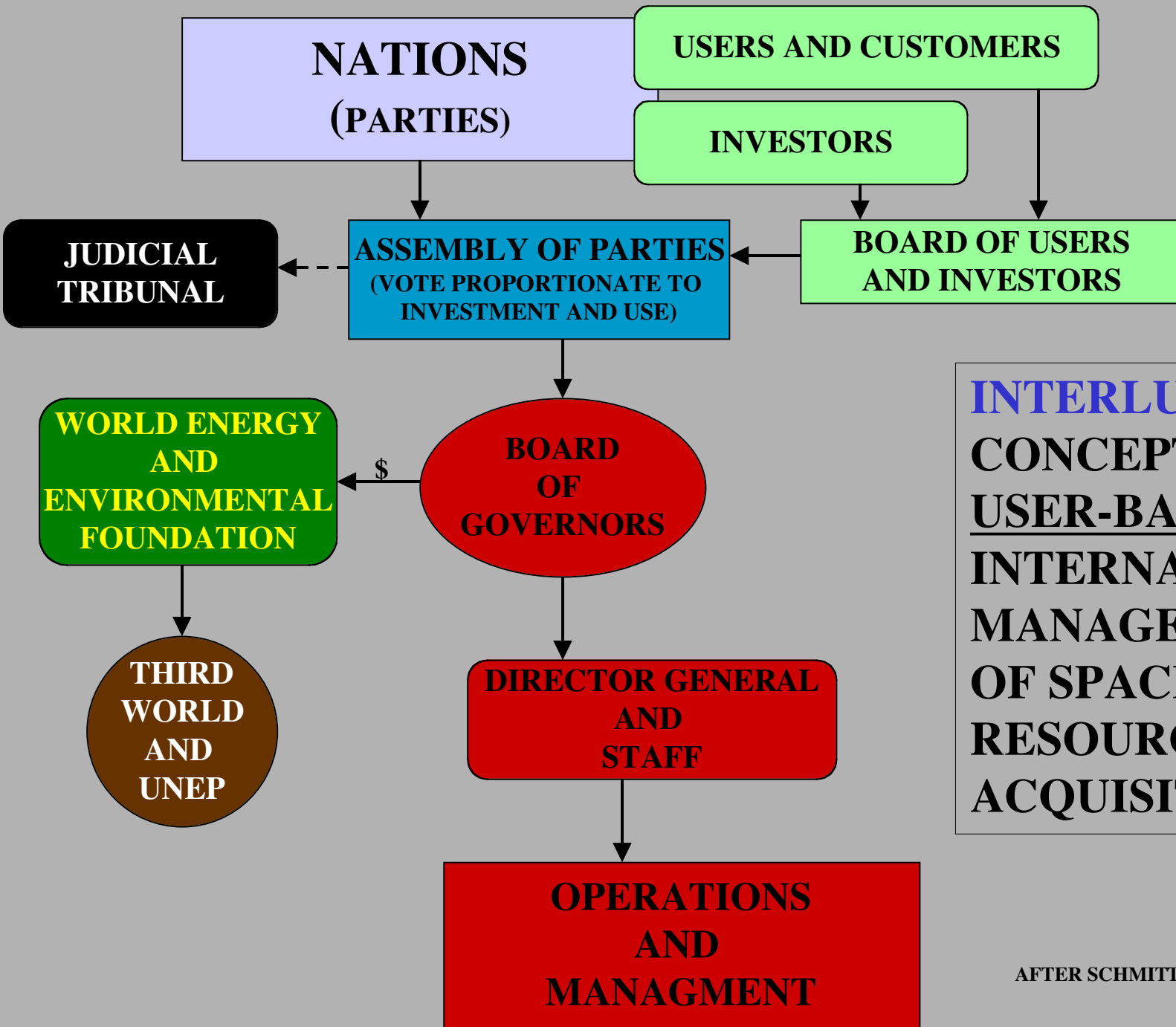
# INTELSAT AGREEMENT - 1964

- RESULT OF 1963 KENNEDY DECISION TO SHARE U.S. COMMUNICATIONS TECHNOLOGY WITH THE WORLD
- PURPOSE TO PROVIDE INTERNATIONAL PUBLIC TELECOMMUNICATIONS VIA SATELLITES
- USER-BASED CONTROL, I.E., SHARES BASED ON PERCENT UTILIZATION OF THE SYSTEM
- NONDISCRIMINATORY PRICING STRUCTURE FOR ITS SERVICES
- THINLY USED LINKS SUBSIDIZED
- U.S. INITIALLY WOULD HAVE HAD MAJORITY CONTROL BUT VOLUNTARILY LIMITED SHARE TO 40% (NOW MUCH LESS)
  - ORGANIZED TRAINING PROGRAM FOR THIRD WORLD NATIONS
  - U.S. TELECOMMUNICATIONS TRAINING INSTITUTE A RECENT CLONE
- RECENTLY REORGANIZED INTO A PUBLIC CORPORATION
  - MAJOR PROBLEM HAS BECOME INABILITY TO COMPETE WITH PRIVATE COMMUNICATIONS SYSTEMS DUE TO REQUIREMENT TO SUBSIDIZE THINLY USED LINKS



# INMARSAT AGREEMENT - 1976

- SAME STRUCTURE AS INTELSAT FOR MOBILE MARITIME COMMUNICATIONS
- EXPANDED INTO LAND MOBILE COMMUNICATIONS
- SPUN OFF A PUBLIC CORPORATION TO COMPETE IN SATELLITE-BASED MOBILE COMMUNICATIONS - FAILED
- LESSONS LEARNED FROM INTELSAT AND IMARSAT EXPERIENCE
  - USER-BASED, INTERNATIONAL ORGANIZATIONS LIKE INTELSAT AND INMARSAT, WITH NARROW AND ACHIEVABLE OBJECTIVES, WORK, AT LEAST UNTIL COMPETITIVE SERVICES BECOME INEVITABLE
    - EVERY PARTY HAS ALWAYS PAID THEIR BILLS TO RETAIN WHAT IS PERCEIVED TO BE INDISPENSABLE SERVICE
    - DESIGNED TO IMPROVE AND EXPAND SERVICE TO AN EXISTING MARKET



**INTERLUNE: A CONCEPT FOR USER-BASED INTERNATIONAL MANAGEMENT OF SPACE RESOURCES ACQUISITION**



# INTERLUNE CONCEPT

## ENTITIES INVOLVED

- **NATIONS**
  - TRADITIONAL PARTIES TO TREATIES AND INTERNATIONAL AGREEMENTS
- **USERS AND CUSTOMERS**
- **INVESTORS**
  - NON-TRADITIONAL PARTIES BUT NOW PART OF THE INTELSAT AND INMARSAT PUBLIC CORPORATIONS
- **ASSEMBLY OF PARTIES**
  - MEMBER NATIONS
  - POLICY AUTHORITY
  - ~ SHAREHOLDERS - VOTE PROPORTIONAL TO CONTRIBUTIONS
- **BOARD OF GOVERNORS**
  - MAJOR CONTRIBUTING NATIONS
  - OPERATIONAL AUTHORITY OVER THE DIRECTOR GENERAL
  - ~ BOARD OF DIRECTORS
- **BOARD OF USERS AND INVESTORS**
  - REPRESENTED ON THE BOARD OF GOVERNORS
  - PRESENT RECOMMENDATIONS AFFECTING THE INTERESTS OF USERS AND INVESTORS
  - INFLUENCE A FUNCTION OF THE LEVEL OF DEPENDENCE ON INVESTMENT CAPITAL AND USER PAYMENTS
- **DIRECTOR GENERAL AND STAFF**
  - OPERATION AND MANAGEMENT
- **JUDICIAL TRIBUNAL**
  - FINAL ARBITER OF INTERNAL DISPUTES RELATED TO INTERPRETATION OF THE CHARTER
  - FINAL COURT OF APPEALS IN CRIMINAL AND CIVIL MATTERS
- **WORLD HE-3 ENERGY AND ENVIRONMENT FOUNDATION**
  - RECOGNIZES "COMMON HERITAGE" AND "ENVIRONMENTAL HERITAGE" THEMES OF MODERN INTERNATIONAL LAW
  - THIRD WORLD NATIONS AND UNEP WOULD BE AMONG THE BENEFICIARIES
  - ASSIST IN THE BROAD UTILIZATION OF FUSION POWER
  - ASSIST IN COUNTERING THE EFFECTS OF GLOBAL CHANGE WHATEVER ITS CAUSE MAY BE

# **INTERLUNE - 2**

## **PROVISION FOR SELF-DETERMINATION**

- **SEATS FOR PERMANENT SETTLERS ON**
  - **THE ASSEMBLY OF PARTIES**
  - **BOARD OF GOVERNORS**
  - **JUDICIAL TRIBUNAL**
- **INCENTIVE COMPENSATION FOR PERMANENT SETTLERS**
- **PROVISION FOR ACCUMULATION OF VOTING SHARES BY PERMANENT SETTLERS**
- **RECOGNITION THAT THE SUCCESS OF INTERLUNE WILL ULTIMATELY GUARANTEE POLITICAL AND FINANCIAL CONTROL IF DESIRED**

# INTERLUNE -3

## ANCILLARY GOALS

- **DEVELOP A CUSTOMER BASE ON EARTH**
- **SEEK A COMPETITIVE RETURN ON INVESTMENT (ROI)**
- **ENSURE THE NEUTRALITY AND SECURITY OF ITS ACTIVITIES**
- **IMPLEMENTATION WILL BE DIFFICULT WITHOUT AN AGGRESSIVE COMMITMENT BY THE U.S.**
  - **WINDOW OF OPPORTUNITY HAS PROBABLY CLOSED ON THIS OPTION**

# **INTERNATIONAL SPACE STATION (ISS) INTERGOVERNMENTAL AGREEMENT (IGA) OF 1988**

- **SIGNED INITIALLY BY US, EUROPE (ESA), JAPAN, AND CANADA**
- **PARTIALLY BASED ON ANTARCTIC AND SPACE TREATY-LIKE ARRANGEMENTS**
- **INNOVATIVE PROVISION ON CRIMINAL JURISDICTION**
- **EACH PARTY RESPONSIBLE FOR FUNDING AND BUILDING ITS CONTRIBUTION**
- **U.S. (NASA) RESPONSIBLE FOR LAUNCH, INTEGRATION, AND OVERALL MANAGEMENT**
- **WITHDRAWAL ALLOWED WITH 1 YEAR NOTICE**



# **INTERNATIONAL SPACE STATION (ISS) INTERGOVERNMENTAL AGREEMENT (IGA) OF 1988**

- **RUSSIA INVITED TO JOIN AFTER SEVERAL REDESIGNS OF ISS**

- **FOREIGN POLICY OBJECTIVES AND ALLEGED COST SAVINGS**
- **REVISED IGA**

- **PHASE I (1994-1998):**

- **JOINT SPACE SHUTTLE AND MIR ACTIVITIES**

- **PHASE II (1997-1999 AND SLIPPING):**

- **RUSSIA WILL BUILD AND LAUNCH**
  - » **CENTRAL CORE MODULE (PROVIDING GN&C)**
  - » **PROVIDE RE-BOOST THROUGH A PROGRESS MODULE**
  - » **PROVIDE CREW RETURN VEHICLES (SOYUZ) IN SUPPORT OF U.S. POWER AND HABITATION MODULES PROVIDING FOR A CREW OF 6**
- **U.S. WOULD PROVIDE BACK-UP CREW RETURN MODULE**

- **PHASE III (2000-2004 AND SLIPPING):**

- **EUROPEAN, JAPANESE, CANADIAN, AND RUSSIAN RESEARCH MODULES ADDED.**

- **CREW COMMAND AGREEMENT REACHED IN NOVEMBER 1997**

- **US COMMAND FOR FLIGHTS ONE AND THREE**
- **RUSSIAN COMMAND FOR FLIGHTS TWO AND FOUR**

# **INTERNATIONAL SPACE STATION (ISS)**

## **ISSUES WITH RESPECT TO RUSSIA**

- **POLITICAL STABILITY OF RUSSIA / RELIABILITY OF NASA AS MANAGER**
- **RELATIONS BETWEEN RUSSIA AND THE U.S. RELATIVE TO OTHER INTERNATIONAL ISSUES (SERBIA, IRAQ, NORTH KOREA, CHINA, ETC.)**
- **ADEQUATE FUNDING FOR ITS COMMITMENTS**
- **RUSSIAN PARTICIPATION ORIGINALLY LINKED TO ITS ADHERENCE TO THE (BALLISTIC) MISSILE TECHNOLOGY CONTROL REGIME (MTCR) AND TO THE TRANSFER OF LARGE SUMS (ABOUT \$590 MILLION AS OF 1996) OF US DOLLARS.**
- **MORE DOLLAR TRANSFER (>\$400 MILLION) AS RESULT OF MISSIONS TO MIR AND RE-SUPPLY OF MIR**
- **U.S. CONGRESS WORRIED ABOUT ISS DEPENDENCY ON RUSSIAN PERFORMANCE AND STABILITY**
- **ORIGINAL SAVINGS (2 YEARS AND \$4 BILLION) HAVE DISAPPEARED.**
- **RUSSIAN LAUNCHES DEPEND ON GOOD RELATIONS WITH BOTH KAZAKISTAN AND UKRAINE.**



← SOYUS

# **INTERNATIONAL SPACE STATION (ISS)**

## **ISSUES WITH RESPECT TO NASA**

- **NASA'S OWN TECHNICAL AND POLITICAL ISSUES ARE FORMIDABLE**
  - **>\$5 BILLION OVER-RUN BETWEEN 2000 AND 2001 IN A \$25 BILLION PROGRAM**
  - **VIOLATION OF CONGRESSIONALLY MANDATED CAP OF \$25 BILLION**
  - **MAJOR PROGRAMS HAVE BEEN MANAGERIALLY DIFFICIENT**
    - **NO OVER-ALL PROGRAM MANAGEMENT PLANS**
    - **NO FINANCIAL MANAGEMENT PLANS**
    - **NO RISK MANAGEMENT PLANS**
  - **THREE INDEPENDENT AUDITS OF ISS COULD NOT TRACE NASA EXPENDITURES**
- **LAUNCH SCHEDULE MARGINS IF LAUNCH RATE GOES TO 4/YEAR**
- **SHUTTLE OPERATIONS AND FUNDING**
- **EXTRAVEHICULAR ACTIVITY REQUIREMENTS PARTICULARLY AS ISS AGES**
- **CONGRESSIONAL SUPPORT IF THERE IS A MAJOR PROBLEM**
- **RUSSIAN LEVERAGE WILL CONTINUE TO BE ANNOYING IF NOT DANGEROUS**
  - **NASA CURRENT JUSTIFICATION FOR CONTINUING WORK WITH RUSSIA**
    - **NEED RUSSIAN MIR EXPERIENCE FOR SUCCESSFUL ISS**
    - **NO CHOICE EXCEPT DEVELOPMENT OF LONG DURATION SHUTTLES**
  - **U.S. JUSTIFICATION FOR CONTINUING WORK WITH RUSSIA**
    - **KEEP RUSSIAN SCIENTISTS AND ENGINEERS EMPLOYED AND AWAY FROM EMPLOYMENT BY ROGUE NATIONS**
    - **PROBABLY LITTLE CHOICE WITH ISS IN ORBIT**

# **INTERNATIONAL SPACE STATION (ISS) LESSONS LEARNED?**

- **DO NOT NEGOTIATE AGREEMENTS PIECEMEAL.**
- **INSURE THAT ALL PARTIES HAVE A VESTED INTEREST IN THE SUCCESS OF THE ENTERPRISE.**
- **START WITH AS SIMPLE AN ENGINEERING AND OPERATIONAL DESIGN AS THE PRINCIPLE GOAL OF THE ENTERPRISE PERMITS.**
  - **ALLOW FOR GROWTH**
  - **PLAN ON INDEFINITE LIFE FOR THE FACILITY**
- **ALTHOUGH DEVELOPMENTS HAVE ENDANGERED THE SUCCESS OF THIS AGREEMENT, IT DOES PROVIDE SOME PRECEDENTS ON COOPERATION BETWEEN PARTNERS EACH WITH SIGNIFICANT TECHNICAL AND FINANCIAL RESOURCES TO BRING TO THE TABLE.**
  - **HAD THE INTELSAT MODEL BEEN USED, THE SITUATION MIGHT BE BETTER FOR ALL PARTIES**



# **INTERNATIONAL SPACE STATION (ISS) ISSUES FOR NEW NASA ADMINISTRATOR**

- **REPAIR PROGRAM AND FINANCIAL MANAGEMENT STRUCTURE**
  - RATIONALIZE HEADQUARTERS MANAGEMENT STRUCTURE
  - SPIN-OFF SPACE SHUTTLE AND ISS INTO SEPARATELY MANAGED SUBSIDERARIES?
- **REBUILD SKILL LEVELS REDUCED BY INDISCRIMINATE PERSONNEL CUTS / RETIREMENTS**
  - PARTICULARLY IN THE SPACE SHUTTLE PROCESSING AREA
  - “YOUNG” THE AGENCY
- **LIVE WITH A STATIC BUDGET FOR TWO OR MORE YEARS**
  - REDUCE SHUTTLE FLIGHT RATE?
  - FULLY PRIVATIZE SHUTTLE?
  - REDUCE PERSONNEL EVEN MORE?
  - CLOSE ONE OR MORE CENTERS?
  - REDUCE SCIENCE PROGRAMS?
- **REDUCE OR ELIMINATE RUSSIAN LEVERAGE**
  - DEVELOP KITS FOR LONG DURATION SHUTTLE STAYS AT ISS?
    - REPLACES CANCELED CRV, HABMOD AND PROPMOD AND ALLOWS EXTENDED WORK BY SIX OR MORE PERSONS
  - RE-NEGOTIATE IGA?
  - SET UP U.S. “PROFESSIONAL” OR “TOURIST” IN SPACE INITIATIVE?
- **STIMULATE COMMERCIAL ACTIVITIES IN SPACE**
  - R&T PROGRAMS IN COOPERATION WITH INDUSTRY?
  - PRICE LAUNCH COSTS AT THE MARGINAL COST?
  - PRICE LAUNCH COSTS AT ZERO FOR FIRST TWO TRIPS?

# **INTERNATIONAL ENVIRONMENTAL AGREEMENTS -1**

- **IMPORTANT FOR SPACE LAW**
  - **ATMOSPHERE OF ANTI-U.S INTERNATIONALISM FROM LEFT OF CENTER**
  - **PRECEDENTS FOR ENVIRONMENT-BASED ATTACKS ON USE OF SPACE RESOURCES**
    - **EUROPEAN ASTRONOMERS**
- **UNITED NATIONS FRAMEWORK CONVENTION ON CLIMATE CHANGE (1992) (RIO ENVIRONMENTAL TREATY)**
  - **ACHIEVE STABILIZATION OF GREENHOUSE GAS CONCENTRATIONS IN THE ATMOSPHERE**
    - **RETURN TO 1990 EMISSION LEVELS**
  - **WITHIN A TIME FRAME SUFFICIENT TO ALLOW ECOSYSTEMS TO ADAPT NATURALLY TO CLIMATE CHANGE, TO ENSURE THAT FOOD PRODUCTION IS NOT THREATENED, AND TO ENABLE ECONOMIC DEVELOPMENT TO PROCEED IN A SUSTAINABLE MANNER.**
  - **U.S. A SIGNATORY (BUSH-1 ADMINISTRATION)**

# **INTERNATIONAL ENVIRONMENTAL AGREEMENTS -2**

- **KYOTO PROTOCOL OF 1997 A FOLLOW-UP TO THE RIO TREATY**
  - **PRESIDENT BUSH WILL NOT SUPPORT / NO ACTUAL SUPPORT IN THE SENATE (99-0 AGAINST)**
    - **CHINA, INDIA, EUROPE AND RUSSIA GIVEN SPECIAL TREATMENT AT U.S. EXPENSE**
    - **ENERGY GROWTH IS FOUNDATION OF THE CONTINUED GROWTH IN THE U.S. ECONOMY AND ITS SUPPORT OF OUR POLITICAL ROLE IN THE WORLD**
    - **ENVIRONMENTAL RESTRICTIONS ON U.S. USE OF COAL WILL REDUCE PRICE COMPETITIVENESS OF U.S. TRADE**
  - **MIDTERM OPTION FOR U.S. IS RAPID GROWTH OF NUCLEAR POWER**
    - **WE HAVE NOT BEEN SCARED ENOUGH YET TO GO THIS WAY**
  - **LONG-TERM OPTION IS ENERGY FROM SPACE**
    - **THAT'S WHAT THIS COURSE IS EXPLORING**

# U.S. REGULATORY LAW IN SPACE

- **COMMUNICATIONS LAW OF 1934, ETC.**
  - **FREQUENCY ALLOCATION AND LIMITS ON USE**
- **COMMERCIAL SPACE ACT OF 1998**
  - **ASSETS ARE PRIVATE PROPERTY**
  - **LAUNCH LICENSES**
  - **RETURN PAYLOAD LICENSES**
- **PROPERTY (LAND) RIGHTS LEGISLATION WITHIN CONTEXT OF OUTER SPACE TREATY?**
  - **COULD U.S. ESTABLISH ITS OWN REGIME OF PROPERTY RIGHTS AS PART OF ITS AUTHORIZED OVERSIGHT OF ITS NATIONAL ENTITIES, I.E., PRIVATE ENTERPRISES AND WITHOUT DECLARING NATIONAL SOVEREIGNTY OF THE “LAND” IN QUESTION?**
  - **CREATE A PROPERTY RIGHTS FRAMEWORK TO GOVERN U.S. ENTITIES AND ESTABLISH THE PROPERTY RIGHTS PARAMETERS FOR OTHERS THAT U.S. ENTITIES MUST RECOGNIZE**
  - **PROPERTY RIGHTS WOULD SIGNIFICANTLY INCREASE INCENTIVES FOR PRIVATE INVESTMENT.**
  - **PRECEDENTS**
    - **COMMERCIAL SPACE ACT**
      - **U.S. SPACE ASSETS AND RETURNED PAYLOADS CAN BE PRIVATE PROPERTY**
      - **HAS NOT BEEN QUESTIONED BY THE INTERNATIONAL COMMUNITY**

# **IS THE SPACE TREATY OF 1967 ENOUGH TO ASSURE PROPER BEHAVIOR DURING RESOURCE ACQUISITION?**

- **LICENSING STATE CAN WITHDRAW LAUNCH, COMMUNICATIONS AND RETURN PAYLOAD LICENCES FOR CAUSE**
  - **ENFORCE COMPLIANCE BEFORE RE-ACTIVATION**

- **WORLD COMMUNITY CAN BRING MATTER TO THE WORLD COURT AND/OR ENFORCE SANCTIONS**

- **EITHER ACTION WOULD HAVE SERIOUS IMPACT ON OFFENDING ENTITY'S ABILITY TO MAINTAIN ITS SPACE OPERATIONS**

- **SAFETY OF PERSONNEL**
- **ACCESS TO CAPITAL**
- **ACCESS TO MARKETS**

